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FRENCH PREDECESSORS
OF MALTHUS

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*A Study in Eighteenth-Century Wage
and Population Theory*

BY

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TO
A. B. WOLFE

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PREFACE

WHILE engaged in the preparation of an earlier volume, *France Faces Depopulation*, the present writer felt the lack of a careful, detailed, and complete study of the population and wage theories prevalent in eighteenth-century France. He found some studies of homogeneous groups of writers and of special phases of economic thought, a number concerned with the doctrines of given individuals, and many devoted primarily to other aspects of politicoeconomic philosophy than those here under examination, but none covering eighteenth-century wage and population theory as a whole. The present volume is designed to fill in this gap in the history of economic doctrine; and to better accomplish this purpose, population and wage theory has been given a broader denotation and connotation than is customary today.

The description and analysis of economic thought, as it developed in France in the eighteenth century, present difficulties; for while it saw the replacement of an older way of thought by new types of analysis and new sets of ethicoeconomic values, it did not witness the complete ascendancy of any one homogeneous and consistent value scheme. Optimism did not completely displace pessimism, nor did attachment to simplicity, order, and standardization snuff out all support of their romantic opposites. Liberty, security, and property were widely acclaimed; yet there was continual criticism of privilege and inequality, of speculation and greed, and of the natural or absolute character of the right of property. The advantages of economic individualism, *laissez faire*, and the competitive system were affirmed, and governmental interventionism was condemned; but at the same time the creative role of the state was affirmed, and ethical defenses of communism were advanced. Writers' opinions on these matters frequently colored their discussions of population and related problems.

While the coexistence in time of distinct streams of doctrine has made unfeasible a purely chronological organization of the materials, the treatment of more or less homogeneous groups of writers has been organized on a chronological basis, and the chapter arrangement has been based in part upon chronology. In

large measure writers have been dealt with individually, for although this method of treatment involves repetition, it also permits greater detail.

In Chapter I the opinions of pre-eighteenth-century writers, in especial those of Bodin and later writers, are surveyed. In Chapters II and III the views of the neomercantilists, the agrarians, and the repopulationists are presented. Most of the writers in these three groups emphasized the importance of population growth, but differed in the relative amount of significance they attached to the agricultural and nonagricultural branches of the economy. In Chapter IV the doctrines of Cantillon, the first great economist (albeit a Scotchman by birth) to write in French, and of the French writers who subscribed in essence to Cantillon's treatment of "luxe," are described. Chapter V is devoted to Quesnay and his physiocratic disciples. Chapters VI to VIII are devoted to writers who either ignored in whole or in part the doctrines of the physiocrats, or attacked them. The importance of the philosophes derives from their ethical and political evaluations rather than from their purely economic views. The economists described by us as "nonphysiocratic" are important on other grounds than their interpretations of the doctrines of Quesnay. The antiphysiocrats, on the contrary, are significant as critics of the underlying social philosophy of the physiocrats, and, at times, as anticipators of Marxism. In Chapter IX a summary of the main doctrines and doctrinal changes is given, and an interpretation of certain factors making for these doctrinal changes is attempted.

The writer is especially indebted to his colleague, Professor Robert S. Smith, who read the manuscript and made many suggestions for improvement; to Mrs. J. M. Keech, who, in the preparation of the typescript, suggested appropriate alterations; and to David K. Jackson, who has read the copy and proof and made many contributions to its qualitative improvement. The writer is indebted, too, to the Duke University Research Council and to the Duke University Press for aid and co-operation.

J. J. S.

January, 1942

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FRENCH PREDECESSORS
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CHAPTER I

PRE-EIGHTEENTH-CENTURY POPULATION THEORY

WHILE population theory (in the fuller meaning of the term) in France cannot be said to antedate the latter part of the seventeenth century, there did appear, prior to this time, many expressions of opinion and occasional legislative acts which reflect the attitude of the authors toward demographic factors. This pre-eighteenth-century opinion is roughly divisible into two categories, the scholastic and the mercantilistic; the latter gradually superseded the former after the fourteenth century, only to be disintegrated in turn by new doctrines which began to come to the fore in the late seventeenth and early eighteenth centuries.

The approach of the scholastic writers to wage and population questions differed markedly from that of later writers, irrespective of school. The scholastic writers, as became spokesmen for a universal church, were internationalist in outlook. Moreover, they emphasized otherworldly rather than this-worldly ends and values,¹ and taught that the social and the economic life of the individual is subject to religio-moral prescript. Accordingly, while they expressed occasional opinions with respect to matters pertaining to population, and discussed what constitutes "justice" in interindividual economic relations, they did not concern themselves especially with wage formation, or with the causes and consequences of population growth.

I

The scholastics surrounded the behavior of individuals and groups with restrictions, the removal of which gave distinctive

¹ In so doing they re-enforced the prevailing Weltanschauung, for, as J. U. Nef remarks, "In the twelfth and thirteenth centuries Europeans generally agreed that the highest ideal in human conduct was the renunciation of earthly pleasures. . . . After the thirteenth century, and especially after the Reformation, the ancient Christian ideal of renunciation lost its hold on men" (*J. P. E.*, XLIX, 1941, 1-2).

The *Revue d'histoire des doctrines économiques et sociales* (published in recent years as *Revue d'histoire économique et sociale*) is abbreviated to *R. H. S.*; the *Revue d'économie politique*, to *R. d. e. p.*; the *Journal of Political Economy*, to *J. P. E.*

character to post-scholastic social theory. Economic practice, they said, must consist with such religious and moral principles as man is required to observe if he would gain eternal salvation. While they vested labor, manual and otherwise, with dignity, they also stipulated that each person must accept, as part of the divine plan, the station in life in which he finds himself, and the duties and the rights and privileges associated with it; and that each must perform his allotted task in order that all concerned (i.e., the individual, the family, the state, and the church) may live. Under this arrangement each individual was assured his "proportionate share in the *bonum commune* in things secular and sacred" in accordance with his position in the social organism: thus the worker was entitled to a "just" wage—enough to satisfy his spiritual needs and supply temporal wants consistent with the requirements of his class and station. The scholastics sanctioned private ownership of property, but stipulated that the owner was essentially a steward, and that he must subordinate the use of his property to the general welfare and to the claim of all members of the community to a minimum share in social well-being. They enjoined the individual to consume temperately, and to be generous to others, especially the poor, whose lot (it was assumed) generally was the result of misfortune rather than of personal shortcomings. While lavish expenditure was considered permissible when made for the good of the group or cult (e.g., cathedrals; ecclesiastical rituals, garb, and statuary), luxurious personal consumption was condemned as endangering salvation and as departing from the level of life consistent with moral prescript. In military matters, too, the scholastics circumscribed individual freedom: generally, princes and individuals were obligated not to engage in unjust wars. In later centuries mercantilist writers substituted *etatism* for medieval particularism, and, with respect to control of individual economic activity, state-oriented sanctions for medieval moral prescripts.

The medieval writers were not dominated by reasons of state and race, and they did not concern themselves with population theory as such, but they did comment upon certain moral matters related to population growth. In general, they looked upon population growth as a sign of God's favor, and subscribed to

doctrines and practices definitely conducive to such growth; for they held human life to be sacred, and marriage to be a sacrament, and they inferred from Holy Scripture that large families are good for the individual and the community, and in accord with the divine plan. Accordingly, they held that the marriage-act, while lawful, must not be sought merely for its own sake, and they condemned as sinful voluntary limitation of family size by means other than continence. While they approved sacerdotal celibacy, and described laws against celibacy as in contravention of the obligation of a minority of the population to live in a state of detachment from earthly pleasures, the scholastics² implied that religious celibacy did not interfere with population growth; for the sanctioning of celibacy did not remove the general obligation incumbent upon men to multiply, inasmuch as this obligation was collective rather than individual in character, and was naturally fulfilled by the great noncelibate majority of the population. A number of the monastic orders, some of whose views the scholastic writers reflected, participated in the great internal colonization program, which, by the middle of the fourteenth century, had reclaimed much of Western Europe from swamp and waste, and made possible its repeopling.³

The period which witnessed the rise of an urban commercial civilization, the Renaissance, and the beginning of the Reformation and modern nationalism, saw no immediate and marked change in the attitude of the articulate classes toward population

² Thomas Aquinas and his disciples, many of whom fell under the influence of Aristotle, did not stress the superiority of the state of celibacy and virginity to that of marriage in the same measure as did the earlier scholastic writers and church fathers (C. E. Stangeland, *Pre-Malthusian Doctrines of Population*, New York, 1904, pp. 55-76; H. O. Taylor, *The Classical Heritage of the Middle Ages*, New York, 1901, pp. 142-44, 193).

³ On the internal colonization of Europe see P. Boissonnade, *Life and Work in Medieval Europe* (New York, 1927), Bk. II, chap. ii; also J. W. Thompson, *Economic and Social History of the Middle Ages (300-1300)* (New York, 1928). The latter concludes (*ibid.*, p. 796) that the population of Europe, which declined between the second and the eighth centuries, did not begin to grow again until the eleventh century, and thereafter continued to increase until the Black Death.

The above discussion of medieval social philosophy is based upon V. L. J. Brants, *L'économie politique au Moyen-Âge. Esquisse des théories économiques professées par les écrivains des XIII^e et XIV^e siècles* (Louvain, 1895); B. Jarrett, *Social Theories of the Middle Ages* (London, 1926); G. O'Brien, *An Essay on Medieval Economic Teaching* (London, 1920), and *An Essay on the Economic Effects of the Reformation* (London, 1923), pp. 54-57, 156; E. Troeltsch, *The Social Teaching of Christian Churches* (New York, 1931), pp. 294, 301-04; Stangeland, *op. cit.*, pp. 76-78, 86-87.

growth. Scholasticism and the otherworldly scheme of values went into partial decay, the claims of religio-asceticism were weakened, and the advantages of population growth and urban agglomeration apparently became obvious to the classes which stood to profit therefrom; but a new appraisal of demographic factors did not yet appear. However, as Brants notes, celibacy at times was condemned because it checked population growth;⁴ and at least one writer went so far as to inquire into the circumstances when celibacy is not to be justified. When men are lacking, said this author (probably the fourteenth-century legist, Raoul de Prellès) in his *Songe du Vergier*, celibacy is not justifiable, but when population is sufficient to permit perfect social life, celibacy is not to be condemned, for the nonmarriage of some cannot imperil the race; finally, when the earth is no longer capable of nourishing further increments of population, both reason and nature counsel and impose celibacy.⁵ Although De Prellès was perhaps the first French writer to posit clearly a portion of the population problem, his comments exercised no subsequent influence.⁶ With the coming of the Reformation,

⁴ Religious celibacy was disapproved by Jean de Meun (1250?-1305?), a forerunner of Rabelais, in his immensely popular summary of the lore of courtly love, *Le roman de la rose* (ca. 1270). De Meun founded his disapproval upon naturalistic and anti-ascetic, but not upon political grounds (M. Gorce, *Le roman de la rose*, Paris, 1933, pp. 46, 57-58, 124, 134, 181, 188-89, 196; L. Thuasne, *Le roman de rose*, Paris, 1929, pp. 11-19, 55-56, 76, 125, 142). Although his work was in part a satire on marriage, Jean de Meun made procreation an end, if not the end, of sexual relations (Gorce, *op. cit.*, p. 124). Among the propositions condemned in Paris in 1277 at the request of the Pope are statements unfavorable to sexual continence and not sufficiently strict in respect to sexual relations (*ibid.*, pp. 57-58). On the love and sex element in medieval romances see A. B. Taylor, *An Introduction to Medieval Romance* (London, 1930), pp. 230-53, and S. Painter, *French Chivalry* (Baltimore, 1940), chaps. iv-v; also P. Lacroix, *History of Prostitution* (Putnam trans.; New York, 1931), II, chaps. 55, 60.

⁵ *Songe*, chaps. 297-98, cited by Brants, *op. cit.*, pp. 238-40. De Prellès writes (cited by Brants, *ibid.*, p. 239): "Posset et esse tanta multitudo, quod si ulterius exerceret, terra non esset sufficiens ministrare cibum hominibus, propter quod illo tempore naturae vis et ordo permetteret imo juberet continere."

⁶ R. Gonnard remarks that with the exception of the *Songe* "the medieval doctrine is . . . universally populationist" (*Histoire des doctrines économiques*, Paris, 1930, p. 41). P. Mombert, however (see *Geschichte der Nationalökonomie*, Jena, 1927, p. 81), states that another Frenchman, Johannes Buridanus (ca. 1300-1358), was aware of the possibility of overpopulation. Another writer of this period, the fourteenth-century Arabic historian, Ibn Khaldun, pointed out that the wealth of a country depends upon the size and activity of its population. He indicated, further, that the relationship between wealth and numbers is reciprocal, that wealth increases and the arts advance as population increases, until wealth again sets a limit to population growth. This reciprocal sequence ultimately comes to an end, however; for when

celibacy and the ideal of virginity lost approval in areas where Protestantism became dominant, the monastic and clerical view of the conjugal relation was abolished, divorce and remarriage were sanctioned, and early marriage and the begetting of a numerous progeny were recommended; but the dangers of overpopulation and the need for the emotional refinement of the sexual relation were lost sight of.⁷ Inasmuch as Protestantism did not come to predominate in France, the doctrines of its exponents do not appear to have exercised much specific influence upon articulate French population theory even though some writers were Huguenots.

Pre-seventeenth-century French rulers sometimes inaugurated measures to attract immigrants and to stimulate natural increase—some because they believed governmental revenues to be dependent upon the size of the population, and others because they looked upon population growth as an index of the goodness of government and the dignity of the ruler. Already in the late thirteenth and early fourteenth centuries tax exemptions, permission to transmit property, and assurance of security in time of war, were granted to Italian, Portuguese, and Spanish merchants and tradesmen who settled in France. In later centuries and until the close of the *ancien régime*, offers of freedom, privileges, and naturalization were employed to attract artisans, businessmen, and soldiers to France. Various measures (tax exemptions, safe-conducts to and from fairs and markets, privileges to cities, etc.) were employed in the fourteenth and fifteenth centuries to attract migrants, to favor heads of families, and to facilitate reparation of losses occasioned by the Black Death (1348) and the Hundred Years' War (1337-1453). In 1566 a law designed to prevent abortion and infanticide went into effect.⁸

population and urbanization reach a certain level, the customs decay, and luxury and taxation develop to a point where they discourage production, with the result that depopulation sets in (R. Maunier, *R. H. S.*, VI, 1913, 409-19, and P. A. Sorokin, C. C. Zimmerman, and C. J. Galpin, *A Systematic Source Book in Rural Sociology*, Minneapolis, 1930, I, 53-68). Ibn Khaldun's cyclical theory apparently was unknown to contemporary and later French authors.

⁷ E. Troeltsch, *Protestantism and Progress* (London, 1912), pp. 93-97; also Stangeland, *op. cit.*, chaps. ii-iii.

⁸ J. M. H. Mathorez, *Les étrangers en France sous l'ancien régime* (Paris, 1919), I, 80-82, 98-138; L. Schöne, *Histoire de la population française* (Paris, 1893), pp. 79-81, 99-113, 144, 261.

II

In the late fifteenth, sixteenth, and seventeenth centuries the cultural and economic changes under way served to intensify interest in population problems. The development of printing enkindled new interests. Worldly objectives gradually superseded the otherworldly ends which had dominated the medieval scheme of values. Laymen with lay points of view began to put on paper their opinions with respect to population and related questions. The discovery of America and its colonial possibilities, the growth of nationalism, the consolidation of states, continuous commercial and industrial expansion, changes in military organization and methods, and the series of struggles between the rival commercial empires of Western Europe, operated in combination to alter political perspectives and to intensify the seeming importance of demographic expansion. In France, *pari passu* with the expansion and consolidation of the state and the centralization of power, there developed an absolutistic political philosophy which made of strengthening the state the supreme end, to the attainment of which all economic and social policies must be made subservient. This philosophy, commonly known as mercantilism, proceeded upon the assumption that the interests of nations are antithetical, and that therefore the economic and military resources of France must be mobilized in such wise as to weaken her actual and potential enemies; it emphasized the importance of precious metals and, in consequence, the means whereby such metals might be obtained, namely, manufactures and foreign commerce. In the eyes of some exponents of this philosophy the individual was a mere breeder and worker for the state—a tool whose sole function it was to implement the state and make it strong; and the strength of the state turned ultimately upon the number of such tools at its disposal. Occasionally, however, mercantilists defended religious tolerance because they believed that it would attract immigrants, and sought some improvement in the well-being of workers on the ground that it would swell the power of the state.⁹

⁹ Eli F. Hecksher, *Mercantilism* (London, 1935), I, 22, 28; II, 20-21, 327-29; H. J. Laski, *The Rise of European Liberalism* (London, 1936), pp. 21-22, 28, 60, 143; C. W. Cole, *Colbert and a Century of French Mercantilism* (New York, 1939), pp. 23-

The mercantilistic philosophy which we have outlined, and which reached its highest development under Colbert, did not come into being at once; for while many commentators and writers accepted the view that increase in number is advantageous, and while some accepted other doctrinal elements of mercantilism, it required the writings of Bodin, Laffemas, and Montchrétien, together with the organizational efforts of Mazarin and Richelieu, to give form to Colbertism. At all times, apparently, some commentators were content merely to express approval of numbers, some rejected the bellicoseness and expansionism of mercantilism, and some, following the ancients, stressed the importance of agriculture to the exclusion of industry and commerce: none of these, therefore, felt the need for numbers as did the more Faustian mercantilists.

The comment that population growth is desirable, or the stereotyped observation that the glory of the king consists in the multitude of his subjects, occurs a number of times in and after the fifteenth century—in cahiers, in remonstrances, in decrees, and in books of advice to princes¹⁰—but it is not accompanied by analysis of the causes and effects of population growth. That the dignity (and sometimes the strength) of kings consists in the number (and sometimes the opulence) of their subjects was subscribed to, for example, by Louis XI and Henry IV;¹¹ by G. Budé (1467-1540), the humanist and jurist who helped to develop the theory of monarchical absolutism;¹² by the Huguenot

26; E. Silberner, *La guerre dans la pensée économique du XVII^e au XVIII^e siècle* (Paris, 1939), pp. 11, 262 ff. The doctrines summarized above were not peculiar to France, but they flourished there as much as, if not more than, in any European country.

¹⁰ This class of literature is discussed in A. H. Gilbert's *Machiavelli's Prince and Its Forerunners* (Durham, 1938).

¹¹ Schöne, *op. cit.*, p. 106; C. W. Cole, *French Mercantilist Doctrines Before Colbert* (New York, 1931), p. 171. Louis, in fact, merely quoted Proverbs 14: 28. The king was great as representative of his country, for he contained in his person the greatness of his people (Jarrett, *op. cit.*, p. 24).

In *Dicaearchiae Henrice regis* (ca. 1556), a collection of edicts that author desired the king to issue, Raoul Spifame advocated that men marry by the age of 25-58, girls by the age of 14-17; that the hospital system be reformed; that sanitation be improved; that work be provided for the idle; and that the poor be enabled to cultivate idle land. See summary in J. W. Allen, *A History of Political Thought in the Sixteenth Century* (London, 1928), pp. 299-301.

¹² *De l'institution du Prince* (Paris, 1548), p. 19, cited by Schöne, *op. cit.*, p. 122.

leader, H. Languet (1518-1581).¹³ The general advantage of populousness is noted by other advisers of princes. For example, E. Colonna, a scholastic and disciple of Aquinas, Aristotle, and Vegetius, dwelt upon the advantages of large families, both for the members of such families and for the nation; but he opposed premature marriage on the ground that it was likely "to be injurious to the children to be born and to impair the mutual happiness of the married."¹⁴ He also preached continence in sexual relations, and moderation in the desire for wealth. P. Boaistuaau favored peace because population and cities grow in times of tranquility.¹⁵ Gentillet, who believed a large population to be the real source of a nation's wealth, looked upon strife and bad laws as checks to population growth; he also condemned luxury as inimical to national welfare.¹⁶

Among the writers who did not accept the mercantilist scheme of values, and whose writings may have contributed in some measure to keeping alive a temper of opinion which later contributed to the dissolution of mercantilism, Montaigne, Sully, La Mothe Le Vayer, and Hay may be mentioned. Montaigne's comments upon demographic matters were not penetrating. Thus, about 1580 he noted that early marriage was advantageous for the working classes, but not for the *rentier* and noble classes, inasmuch as children were an asset only for working-class families; and that, as the early Greek writers had observed, overpopulation was possible but mitigatable through emigration.¹⁷ His nondemographic views, however, ultimately proved of importance in that his skepticism and his primitivism—disposition to look upon precivilized men as exemplars of human conduct—in-

¹³ In *Harangue au nom des protestants d'Allemagne* (Dec. 23, 1570), addressed to Charles IX, Languet added that the "conservation" of subjects is the principal law of God and nature (Schöne, *op. cit.*, p. 122).

¹⁴ The *De regimine principum* was first printed in France in 1473 as *Li livres du gouvernement des rois*. See *ibid.*, ed. S. P. Molenaar (New York, 1899), pp. xx-xxi, 21, 25-27, 54-58, 379-80, and Bk. II. This work was composed for Phillip the Fair (1268-1314). The author emphasized the advantage to the state of a large middle class, asserted that nobles made better soldiers than rural villains, and denied that the highest good of a government consists in the size of its armies.

¹⁵ *Institution des princes chrétiens et origins des royaumes* (Paris, 1557, 1559), cited by Schöne, *op. cit.*, p. 123.

¹⁶ *Discours sur les moyens de bien gouverner ou Anti-Machiavel* (Paris, 1576, 1620), cited in Cole, *Mercantilist Doctrines*, p. 196, and Schöne, *op. cit.*, p. 121.

¹⁷ *Essays*, trans. E. J. Trechmann (London, 1927), I, 378; II, 132-33.

fluenced subsequent writers, and thus helped give rise to the later naturalistic and primitivistic attack upon the Colbertian scheme of values, and to the antirationalism of men like Rousseau.¹⁸

Although Sully (1560-1641), minister of finance under Henry IV, was later regarded by the physiocrats as the personification of antimercantilistic policy, his opinions and policies were only partly antimercantilistic; for he did much to consolidate royal power, and supported state intervention. Furthermore, while he was not an explicit populationist, he did not reject *étatistic* demographic objectives; and while he proposed that Christian states form a league and renounce aggression upon one another, he did not completely renounce the bellicose ends of military mercantilism. Specifically, he opposed colonial expansion abroad, emphasized the primary economic importance of agriculture, and urged that the condition of agriculture and of rural population be improved, saying that ruralists made the best soldiers.¹⁹ Furthermore, in consistence with his appreciation of rural life, he extolled simple living and domestic virtues, and favored restriction of the consumption and importation of luxuries.²⁰

Neither populationism nor mercantilistic policies received much support in *La politique du Prince* and other works of La Mothe Le Vayer (1583-1672), a state councilor and a disciple of

¹⁸ G. Boas, *The Happy Beast in French Thought of the Seventeenth Century* (Baltimore, 1933); L. I. Bredvold, *The Intellectual Milieu of John Dryden* (Ann Arbor, 1934), chap. ii.

¹⁹ Sully was influenced, as was Montaigne, by Xenophon's *L'économique*, which went through a dozen editions in 1516-61. Xenophon eulogized agriculture and husbandmen as much as any of the many classic writers who commented favorably upon agriculture and rural life (P. A. Sorokin and others, *op. cit.*, pp. 24-52). Schöne (*op. cit.*, pp. 133-34) infers from a passage in Sully's *Œconomies royales* that he may have supposed population to remain fairly constant.

²⁰ *Mémoires of the Duke of Sully* (London, 1856), II, 453-54; Cole, *Mercantilist Doctrines*, pp. 204-12, and *Colbert*, I, 40-45; C. Turgeon, *R. H. S.*, XI (1923), 249-69; G. Weulersse, *R. H. S.*, X (1922), 232-51; Silberner, *op. cit.*, pp. 138-40. On economic conditions and policy in Sully's time see E. C. Lodge, *Sully, Colbert, and Turgot* (London, 1931), and J. U. Nef, *Industry and Government in France and England 1540-1640* (Philadelphia, 1940). Sully's brother, Philippe de Béthune (?-1649), believed that statesmen "must favor the generation . . . of children" if they would people a country and make it wealthy; that polygamy was comparatively unfruitful; and apparently that the number of celibates ("which unfurnish the state of men") ought not be permitted to expand beyond the number actually needed for religious purposes. See his *The Councillor of Estate* (English trans., London, 1634), pp. 141, 143, 321-27.

Montaigne and the classic writers. He described France as the European land most able to send colonies abroad, and colonization as a means of ridding the state of troublesome elements and thereby preserving order; yet he did not suggest an aggressive colonial policy, emphasizing instead the advantages of peace and the dangers of extending a state's domain too rapidly. He viewed commerce as a means of correcting the unequal distribution of nature's abundance, but warned that "very often Prosperity effeminates us." In what apparently is a reply to the exponents of xenophobia he stressed the cultural contributions that foreigners and immigrants bring to states, but he did not advance economic arguments in support of immigration. Even in his discussion of marriage and family life he failed to treat of the advantages then assumed to attach to large families.²¹

In Colbert's time Paul Hay, Marquis de Chatelet and forerunner of Vauban, pointed out that extreme poverty conduced to death and disease and thus served to depeople rural regions; that tax reforms were necessary to improve economic conditions. Although he opposed the association of rural with urban workers, on the ground that the former would become insolent and acquire corrupt customs, he asserted, unlike Colbert, that man's happiness is the end of "la politique." He condemned the proposed expulsion of the Huguenots as unchristian. To insure the health of parents and the robustness of children, he proposed advancing from 14 and 12 to 20 and 18, respectively, the ages at which males and females could marry.²²

²¹ See *Œuvres* (Paris, 1654), I, 874-76, 887-89; II, 28-33, 39-44, 177 ff., 282 ff. A contemporary of La Mothe Le Vayer, the monk Eméric Crucé (ca. 1590-1648), in a work apparently without subsequent influence (*Le nouveau cynée*, etc., Paris, 1623), advocated universal peace and international commercial liberty, and the creation of a league of nations and an international police force for the purpose of perpetuating peace. He indicated, among other things, that war was not a cure for internal troubles; that such troubles would not disappear until there was employment and nourishment for all. Crucé's opinions are summarized by Silberner, *op. cit.*, pp. 128-38.

²² *Traité de la politique de France* (Cologne, 1673), pp. 22, 33, 76, 102-03, 272-73. This work, first published in 1669, inspired some of Vauban's ideas on taxation (J. B. M. Vignes, *Histoire des doctrines sur l'impôt en France: les origines et les destinées de la Dixme Royale de Vauban*, Paris, 1909). In 1668 Du Bosc warned that revocation of the Edict of Nantes would cost France over a million inhabitants (K. Martin, *French Liberal Thought in the Eighteenth Century*, Boston, 1929, p. 32). Three decades earlier Le Bret (*De la souveraineté du Roi*, 1632), though an exponent of the view that the "raison d'État" justified political policies, did point out that the lot of the rural popu-

Three writers, Jean Bodin (1530-1596), Barthélemy de Lafemas (1546-1611), and Antoine de Montchrétien (1575-1611), played an important part in the intellectual formulation of mercantilistic social philosophy. While all three were exponents of the doctrine of national economic self-sufficiency, and while Bodin and Montchrétien looked upon war as a necessary instrument of social policy,²³ only the latter succeeded in partly integrating his views on population with nationalistic philosophy; moreover, none of the three exhibited a very clear understanding of the causes and effects of population growth.

Bodin barely mentioned the subject of population in his first economic study, and even in his principal work he dealt with it only in general terms, presumably because his interest was always focused upon the problem of preserving social stability.²⁴ He approved population growth and urbanization, but did not analyze their effects nor inquire into the circumstances whereupon population growth then depended. Cities "which abound most with citizens," he said, were most rich and progressive; furthermore, they tended to be free of factional strife, inasmuch as the middle and upper classes there tended to be in numerical balance. Although he ridiculed Thomas More's proposal to limit family size to 10-16 children, "as if he might commaund nature," he believed that population growth could and should be stimulated. Specifically, he criticized Plato and Aristotle for rec-

lation was as bad as that of beasts, because the bulk of the tax burden fell upon this population; and that this burden should be shifted in part to the more comfortable classes (H. Sée, *Les idées politiques en France au XVII^e siècle*, Paris, 1923, p. 76).

²³ Underlying their emphasis upon the social importance of war lies the belief that states are natural enemies, and that foreign war makes for national unity and strength. War and conquest not only added to a state's territorial extent and fiscal resources; they also served to rid the state of dissident elements, and thereby prevented civil war and anarchy, the greatest threats to national power and stability (Silberner, *op. cit.*, pp. 15-28). This opinion was not original with Bodin and his disciples: Urban II saw in a crusade against the Turks a means of uniting feuding Christendom, as Saladin later found in the jihad a means of uniting Islam (H. Lamb, *The Crusades*, I, chaps. iv-vii; II, chap. viii). In his *Panegyricus* (380 B.C.) Isocrates advocated a panhellenic attack on Persia as a means of uniting the Greeks.

²⁴ In his first work (*La réponse de Jean Bodin à M. de Malestroït*, 1568, ed. H. Hauser, Paris, 1932, pp. 32-34) he was still an advocate of peace and freedom in international commerce. His main work (*Six livres de la république*, 1576) was essentially a defense of the centralization of sovereignty in the person of the king, as the best solution for the problems then being precipitated by feudal localism, by civil war, and by conflict between church and state.

ommending abortion and child exposure and commended the populationist regulations of Augustus, saying that their abrogation was partly responsible for Rome's dearth of citizens at the time of the barbarian invasions. He approved divorce under certain circumstances, and testamentary liberty, but did not examine the possible effects of divorce and inheritance practice upon population growth.²⁵ He advocated the imposition of heavy taxes upon vices and luxuries, not as a means of promoting population growth, but as a means of placing the burden of supporting the state upon those able to pay and thereby avoiding the political instability to which great economic inequality and unendurable poverty might give rise.²⁶

Although Bodin did not discuss laws of returns, he apparently believed that France could accommodate a large population. In his earlier work he observed that the soil does not lose its vigor, that France could support her population even in bad years so long as supplies were not exported, and that land remained to be cleared.²⁷ His discussion of the merits of protectionism suggests that he supposed that it would increase the volume of employment and the productivity of labor in France.²⁸ His approval of colonies and his recommendation of a census to determine, among other things, how many people could be sent to the colonies, does not suggest fear of population pressure. His attitude toward foreign immigrants was conditioned by his supposition that the presence of too many foreigners sometimes tended to make for political instability.²⁹

Although Bodin had little liking for the "common people,"

²⁵ See Richard Knolles's trans., *The Six Bookes of a Commonweale* (London, 1606), pp. 571, 670. For a general summary of Bodin's political ideas, see B. Reynolds, *Proponents of Limited Monarchy in Sixteenth Century France: Francis Hotman and Jean Bodin* (New York, 1931); H. Baudrillart, *J. Bodin et son temps* (Paris, 1853), pp. 242-44, 250-51.

²⁶ *Commonweale*, p. 670; Reynolds, *op. cit.*, pp. 164-67.

²⁷ *La réponse*, pp. 7, 17, also p. 1. In this work he commented upon the heavy emigration of French workers and tradesmen to Spain. It is of interest to note that Bernard de Girard, seigneur du Haillon, who attributed prevailing high prices in part to the influx of gold and silver, as did Bodin, also gave as a cause of high prices and dearth the growth of population after the termination of the Hundred Years' War and civil strife in France (*Discours de l'extrême cherté qui est aujourd'hui en France et sur les moyens d'y remédier, présenté à la royne mère par un sien fidelle serviteur*, Paris, 1574). See Schöne, *op. cit.*, p. 116.

²⁸ *Commonweale*, Bk. VI, chap. ii.

²⁹ *Commonweale*, p. 426. He advocated a national standing army of French subjects.

and opposed granting them political power, he did not give expression to such disregard for the individual as Colbert later manifested; for he conceived the power of the sovereign to be limited.³⁰ Furthermore, he advocated improving the lot of the common man, and guarding him against inequitable taxation.³¹ He did not infer, however, as did eighteenth-century writers, from his conception of progress in the past and from his belief that "education alters" a people's customs, that there would be progress in the future, or that the common man's lot would improve, or that the development of new methods of production would always counterbalance population growth.³²

Laffemas did not deal with population specifically; rather he formulated a commercial and industrial policy, not fully put into effect until Colbert's time, which had implications for population theory and policy. He believed, presumably, that if manufacturing industries were developed and expanded, population growth would naturally result. French artisans were emigrating, he noted, because France did not offer sufficient opportunity. Were France to exclude foreign manufactures, develop and expand domestic manufactures, and thus augment the supply of precious metals, solve the problem of unemployment, relieve internal distress, and render the nation self-sufficient, he implied, the country would become congenial to natural increase, emigration would cease, and foreign artisans would immigrate.³³ Laffemas' policies, however original, were in accord with the opinion, expressed in cahiers and other documents of this period, that the power of a kingdom rests upon population and money, and that manufactures and commerce constitute the best means whereby population may be supported and moneys may be secured from

³⁰ He conceived of the state as composed of families—natural communities ruled by the *pater familias*—; of the power of the sovereign as limited by the laws of God and nature; and of private property as rooted in natural law.

³¹ *Ibid.*, p. 669; also Reynolds, *op. cit.*, pp. 119, 177.

³² *Commonweale*, p. 565; J. Delvaille, *Essai sur l'histoire de l'idée de progrès* (Paris, 1910), p. 140. Bodin's conception of progress in the past is developed in *Methodus ad facilem historiarum cognitionem* (1566). See also J. B. Bury, *The Idea of Progress* (London, 1924), chap. i.

³³ Cole, *Mercantilist Doctrines*, pp. 63-112; Colbert, I, 27-39, 100-103; Hauser, *Les débuts du capitalisme* (Paris, 1927), pp. 165-66, 171-72, 178-79. On efforts to stimulate the immigration of foreign workers see P. Boissonnade, *Le socialisme d'état* (Paris, 1927), pp. 34-35, 43-44, 163-65, 181-82.

abroad.³⁴ Moreover, the Colbertian *étatisme* implicit in Laffemas' policies grew in scope and force after his lifetime.³⁵

De Montchrétien, a poet and dramatist, though said to have been unfamiliar with the writings of Laffemas, apparently shared the latter's view that healthy economic conditions are favorable to population growth. De Montchrétien believed, apparently, much more than Bodin, from whom he borrowed, that population growth is a source of national power and economic progress. France's greatest wealth consisted in the "inexhaustible abundance of her men,"³⁶ in her supply of laborers ("les pieds de l'Estat"), of whom she had more than any other country.³⁷ While he observed that an abundance of men constituted a source of wealth only if they were employed in the production of goods necessary to life,³⁸ he believed that all could be employed; for he said that any apparent superabundance of population (as evidenced by emigration and unemployment) was not a real superabundance, but an illusory superabundance traceable to correctable disorder and to failure to provide employment.³⁹ Therefore he stressed, as did Laffemas and later mercantilists, the necessity of providing work for all; and indicated, as had Bodin, that political instability could be avoided through the provision of relief for the poor and through the establishment of a balance among the classes.⁴⁰ He

³⁴ H. Hauser, *Les débuts du capitalisme*, p. 186; F. K. Mann, *Der Marschall Vauban und die Volkswirtschaftslehre des Absolutismus* (Munich, 1914), pp. 329-36; Cole, *Colbert*, I, 1-22. On the originality of Laffemas' opinions see Boissonnade, *Le socialisme*, p. 163, and Hecksher, *op. cit.*, II, 123, 145. Prior to 1589 the main French mercantilist ideas appeared in laws and documents emanating from the Estates General (Cole, *Mercantilist Doctrines*, p. 5). Mann observes (*op. cit.*, pp. 329-30) that in periods of strife population growth and precious metals tended to be stressed as sources of national strength.

³⁵ Boissonnade, *Le socialisme*, pp. 151, 309; also Cole, *Colbert*, I, chaps. ii-v.

³⁶ *Traicté de l'économie politique* (1615), Introduction and Notes by T. Funck-Brentano (Paris, 1889), pp. 23, 24. See also J. Duval, *Mémoire sur Antoine de Montchrétien* (Paris, 1868); A. Vène, *Antoine de Montchrétien et le nationalisme économique* (Paris, 1923); Cole, *Colbert*, I, 83-100. ³⁷ *Traicté*, p. 141.

³⁸ *Ibid.*, pp. 31, 39, 124, 226, 241-43, 353; also Duval, *op. cit.*, p. 57.

³⁹ *Traicté*, pp. 24-25. De Montchrétien opposed measures designed to attract foreign artisans, now that France no longer suffered from depopulation, inasmuch as sufficient numbers came voluntarily when conditions were good, and as too many foreigners were already congregated in some places (*ibid.*, pp. 36, 165; also below).

⁴⁰ *Ibid.*, pp. 56-57, 67, 102-07, 347-50. He repeats Bodin's words to the effect that artisans constitute a middle class and therefore a preventive of class strife. Duval states (*op. cit.*, p. 133) that Montchrétien's support of a tax for the support of the poor reflected his experience in England where the Elizabethan poor law went into effect in

advocated not only state intervention for the purpose of developing French industry, but better treatment of the peasants, saying that contentment among peasants would make for the improvement of agriculture.⁴¹ Montchrétien shared some of the prevailing prejudices against luxury,⁴² suggesting that the consumption and admiration of luxuries tended to corrupt morals, impoverish people, and render them effeminate; but he did not advocate sumptuary legislation, presumably because he recognized that the production and consumption of luxuries were necessary to the carrying out of the dynamic economic program which he envisaged.⁴³

Montchrétien's social program called for the establishment of an economic and cultural autarchy, supported by a strong military force and by a navy and merchant marine adequate to integrate France's colonies with the mother country. He did not limit his xenophobia to opposition to the importation of foreign goods, and to the coming to France of foreigners, particularly privileged merchants, on the ground that France thereby lost profit and bullion;⁴⁴ for he looked upon foreigners as parasites, and upon their cultural products as elements which "poison our spirit and corrupt our customs." Wherefore he opposed traffic, material and spiritual, with foreign lands.⁴⁵

Although Montchrétien implied an unlimited population capacity when he said that France could nourish an "infinite number" of inhabitants, he appears to have been thinking in terms of the long run; for elsewhere he said that colonial expansion

1601. Apparently, as Silberner (*op. cit.*, p. 28) observes, Montchrétien was not certain that his economic program would prevent civil war; wherefore he indicated that foreign war and colonial expansion might be necessary to assure internal tranquillity (*Traicté*, pp. 157, 289, 229-301).

⁴¹ *Ibid.*, p. 42.

⁴² Luxurious consumption was often condemned in laws and edicts in 1453-1589 on the grounds that such consumption caused a loss of bullion or precious metals, led aristocrats to squander their patrimony, enabled the well-to-do bourgeoisie to emulate the nobility, or was sinful (Cole, *Mercantilist Doctrines*, pp. 12-13, 61-62, 165-69). Luxury is condemned because it carries money abroad, in a work sometimes attributed to De Montchrétien (cited in *ibid.*, pp. 188-92). See also Cole, *Colbert*, I, 100-109.

⁴³ *Traicté*, pp. 5, 21, 59-61, 120, 353.

⁴⁴ This opinion was not peculiar to Montchrétien, for some of his contemporaries opposed the importation of goods, traffic with foreign merchants, and the hiring of foreign mercenaries (Cole, *Colbert*, I, 92-94, 105, 108).

⁴⁵ *Traicté*, pp. 92, 133, 161-62, 169-70, 193.

would relieve France of poor families and unemployment, enlarge the country's economic compass, and invigorate its economic life. Were colonies developed and peopled with poor, honest, hard-working families, France would no longer lose emigrants to foreign lands; moreover, colonial expansion would enlarge the market for French products and thus augment employment possibilities within France.⁴⁶ Montchrétien did not conceive of the proposed colonial empire as a mere unprivileged handmaiden to the mother state, as did Colbert later; he envisaged it rather as a part of France and as a source of national wealth.⁴⁷

It may be noted at this point that both the writers whose works have been considered, and many who wrote in the seventeenth and even in the eighteenth centuries, failed to discuss the laws of returns and the relationship between the growth of population and the growth of the food supply. This failure may have been due either to their ignorance of these laws and relationships, or to their taking these laws and relationships for granted. With respect to the laws of returns Bye observes that the failure of Sully, of Olivier de Serres (*Théâtre d'agriculture*, 1600), of other predecessors of the physiocrats, and of students of the Roman works on agriculture, to discuss the law of diminishing returns in land was probably due to their considering it "a truth of too great evidence" to require discussion; and that the French and Italian mercantilists favored manufacturing because they considered it elastic—i.e., easy to expand and not susceptible to diminishing returns, as was agriculture—and therefore capable

⁴⁶ *Traicté*, pp. 23-24, 51, 220, 229, 314-15. "Since we enjoy peace, the people have multiplied infinitely in this Kingdom. They suffocate one another, and nearly are in need of following the ancient example of several northern nations. How many are there of men burdened with large families, living in extreme poverty, otherwise of innocent and laudable *mœurs*. It is with these people, not with idlers, wretches, and criminals, that a new world must be peopled. There would come to you therefrom honor and profit for all, amplification of your State, increase at the bottom of your finances; strength on sea as well as on land to your crown. France would quit this faint-hearted and sluggish indolence, in which it seems to be enshrouded" (*ibid.*, p. 315; see also pp. 316-33). De Montchrétien seems to have accepted the estimate that over two hundred thousand French had emigrated to Spain. His view that colonial expansion would augment domestic employment was developed later by Benjamin Franklin. See the writer's article, *American Economic Review*, XXV (1935), 691-98.

⁴⁷ Duval, *op. cit.*, pp. 120-22. Duval, himself a great advocate of French colonial development (see the present writer's *France Faces Depopulation*, pp. 182 ff.), declared (*op. cit.*, p. 121) that one finds in Montchrétien the roots of sound colonial theory and policy.

of providing a comparatively large volume of employment.⁴⁸ If this distinction was recognized by French writers, such recognition did not become anything like explicit until the eighteenth century. In fact, Hecksher⁴⁹ concludes, in no country did the mercantilists show how a growing population could be employed and sustained. Even supposing that Hecksher's conclusion is not wholly supported by the facts, it is evident that prior to the late seventeenth and eighteenth centuries, French writers failed to recognize, explicitly and completely, the dependence of the population upon the food supply, and the various limitations to the augmentability of the food supply of any one country.⁵⁰

One gets from the works of many seventeenth- and eighteenth-century French writers the impression Johnson has got from the works of the English mercantilists;⁵¹ namely, that labor was considered to be by far the most important of the factors of production, and that, consequently, given an augmentation of the supply of labor, the supply of foodstuffs usually could be made to expand in proportion. Some French mercantilists virtually supposed that whereas agriculture was limited by the extent of territory, manufacturing was limited almost solely by the supply of labor and raw materials. Accordingly, they reasoned that, since the supply of labor could be increased through augmentation of the population, since raw materials could be imported in

⁴⁸ "This opposition between the returns of the soil and those of manufactures which became the foundation of classical industrial doctrine is necessarily also at the base of Colbertian industrialism" (M. Bye, *Les lois des rendements non proportionnels*, Paris, 1928, p. 66 and n.). In 1613 the Italian, Antonio Serra, indicated that agriculture is subject to decreasing returns, whereas manufacturing is subject to increasing or constant returns, and based thereon his belief that it is more important for a nation to develop industry than agriculture (Bye, *op. cit.*, p. 67; R. Benini, *Giornale degli economisti*, 2d ser., V, 1892, 222-48). The mercantilists apparently supposed, as do present-day writers who find in industrialization rather than in emigration relief for such overpopulated countries as Japan, that inasmuch as the domestic food supply could not be sufficiently augmented, it could be supplemented through the exchange of manufactured products for foreign-produced foodstuffs.

⁴⁹ *Op. cit.*, II, 162-63.

⁵⁰ Machiavelli recognized the possibility of overpopulation and the operation of positive checks to population early in the sixteenth century (Stangeland, *op. cit.*, p. 93). G. Botero, a translation of whose work appeared in Paris in 1599, clearly indicated that since the "generative force" is stronger than the "nutritive force," population presses upon subsistence and is limited by subsistence (Stangeland, *op. cit.*, pp. 105-07); wherefore, he concluded that the availability of food limits the numerical size of both cities and states.

⁵¹ E. A. J. Johnson, *Predecessors of Adam Smith* (New York, 1937), pp. 247 ff.

exchange for exported manufactures made principally out of labor, and since the value of the manufactured exports tended to exceed appreciably the value of the imported raw materials, it was possible to extend manufacturing almost indefinitely and to obtain from abroad both the necessary provisions and raw materials and a surplus of precious metals. Therefore they looked upon manufactures as an effective means of aggrandizing the power of the state, and upon exclusive colonial markets and sources of raw materials, from which foreign competition was excluded, as especially favorable to the extension of domestic manufactures.⁵² In proportion as it came to be recognized that land is an important factor in production, that land is subject to diminishing returns at the intensive and extensive margins, that it is by no means certain that improvements in agriculture can offset the tendency of returns on land to fall, and that, because of foreign competition and other restrictive circumstances, the foreign markets accessible to any one country may be limited in extent, the above mercantilistic argument broke down.

III

With the development of a crown-centered political and economic totalitarianism in the seventeenth century, mercantilistic and populationist proposals were translated into law and fact; and the centuries-old contempt⁵³ of members of the ruling and upper classes for the common man was transmuted into the doctrine that the common man lives only to work and breed for the state.⁵⁴ "*Raison d'état*" became a sufficient justification of any

⁵² A. Deschamps, *R. H. S.*, VIII (1920), 14-18, 30-35; also below, Chapters IV-V.

⁵³ O'Brien argues that in consequence of the Reformation "in the department of human affairs concerned with the economic activities of men, the old universally accepted code of justice fell into disregard, if not into ridicule; and its place was taken, on the one hand, by the theory that the only safe guide for man to follow in these affairs is his own personal interest, and, on the other hand, and partly as a reaction against this repulsive theory, that the individual has no right of initiative at all, but that his whole being must be subordinated to the welfare of the community" (*Economic Effects of the Reformation*, p. 173).

⁵⁴ Workmen and peasants, especially the former, were commonly held in disesteem in the fifteenth and later centuries, a disesteem founded in part on the theory that the upper classes differed from the lower in racial origin. (On the history of French racial theory and the purposes to which it was put see J. Barzun, *The French Race*, New York, 1932.) "Villains and serfs . . . need the yoke," one writer said in 1484. In the Estates of 1614 the nobles declared themselves unrelated "to the vulgar." Loyseau,

and every public policy, law, or ordinance, and an adequate basis on which to build the only rounded populationist program effected under the *ancien régime*.

Although Richelieu and Mazarin subscribed to much the same political philosophy as Colbert, the arch-populationist of the mercantilist era, they exhibited no direct interest in demography; but they contributed indirectly to the formulation and effectuation of Colbert's demographic policies by centralizing and consolidating political power and by establishing the conditions whereunder Louis XIV was able to reign and govern for more than half a century (1661-1715), the personification of absolute power. (Colbert (1619-1683), finance minister in 1661-83, believing the state to be a vast machine susceptible of direction from the center, brought commerce and industry under a centralized control intended to make France wealthy and powerful.) Wherefore he interpreted Richelieu's sanction, "raison d'état," to mean that subjects had only duties to the state (i.e., to the monarch) and no rights, and that the well-being of the common man was of concern to the government only in so far as his welfare conditioned the politico-military power, the wealth, and the tax yield of the state.⁵⁵ Much of Colbert's program, in fact, appears to have been based on the principle, then generally accepted, that the masses (whom kindness, well-being, and wealth tended to corrupt) made satisfactory beasts of burden only so long as wages were kept at a subsistence level and conditions of work were made onerous and unfavorable.⁵⁶

in his treatise, *Des ordres* (1610), described workers other than peasants as "plus vils." Richelieu looked upon the common man as a "mule" more apt to be spoiled by repose than by work. Some urged that certain classes of workers wear special garbs distinguishing their class. See Barzun, *op. cit.*, chaps. iii-iv, esp. pp. 63, 104; H. Sée, *Les idées politiques en France au XVII^e siècle*, pp. 29, 60-61, 82-83; Boissonnade, *Le socialisme*, pp. 126, 307; Painter, *op. cit.*, pp. 145-47. Taine shows (*The Ancient Régime*, New York, 1896, p. 348) that the French upper classes held the common workers in disesteem even in the eighteenth century. See also G. Renard and G. Weulersse, *Life and Work in Modern Europe*, New York, 1926, pp. 193-94; also Chapter IX, n. 18. F. C. Palm (*The Economic Policies of Richelieu*, "University of Illinois Studies in the Social Sciences," IX, No. 4, 1920, pp. 38-43, 82, 173-74) argues that Richelieu did not want the common people to be overburdened, that he really sought their welfare through measures designed to strengthen the nation.

⁵⁵ Sée, *Les idées*, pp. 186-87. Seventeenth-century writers rarely accepted the thesis that the state had been established for the good of the masses (*ibid.*, p. 181).

⁵⁶ On this point see Hecksher, *op. cit.*, II, 166, 168-69; Boissonnade, *Le socialisme*;

The system of political and economic absolutism, fashioned by Richelieu, Mazarin, and Colbert, was supplied with religious sanction by the theological writers,⁵⁷ in especial by J. B. Bossuet (1627-1704), who saw in the continuity of history the working out of God's will, and in royal absolutism, God's answer to man's political needs.⁵⁸ Bossuet did not share Colbert's extreme disregard for the common man, asserting that the monarch, although absolute, should not act arbitrarily and contrary to God's will; but he did accept Colbert's demographic objectives and marshaled sacred scripture and Christian ethics in their support. "The true riches of a kingdom are its men." In the multitude of his people consists the king's glory; in their diminution, his shame and destruction. It behooved the monarch, therefore, to establish conditions favorable to population growth; to encourage trade; to moderate the tax burden; to facilitate marriage and to prevent prostitution and other forms of illicit alliance; to provide the young with education and to inculcate in them modesty and frugality; to suppress idleness, the common source of immorality and mendicancy.⁵⁹ Bossuet approved the revocation of the Edict of Nantes (1685); yet he long tried to reunite the Huguenots and the Catholics.

Colbert's population theory, in so far as he had a theory, was embodied in his decrees and regulations—decrees and regulations that constituted an integral part of his program to make France rich and powerful. Believing that population growth was especially conducive to the development of industry and a favorable balance of trade,⁶⁰ and to the expansion of national wealth and

n. 54, above. Boissonnade shows that rigid moral discipline of the workers was approved (*ibid.*, pp. 136, 301); that although state policy was not always directed to depressing real wages to the minimum, low wages were approved (*ibid.*, pp. 137-39, 144-45), and actual wages were not only scant but often so low as to render the working population miserable and discontented (*ibid.*, pp. 303-09).

⁵⁷ H. Sée, *L'évolution de la pensée politique en France au XVIII^e siècle* (Paris, 1925), pp. 9-17. ⁵⁸ *Discours sur l'histoire universelle* (Paris, 1681).

⁵⁹ *Politique tirée des propres paroles de l'Écriture sainte* (1709), in *Œuvres*, XXIV, Bk. X (Paris, 1864), art. i, p. 189. For a summary of Bossuet's views see N. Sykes, in F. J. C. Hearnshaw (ed.), *The Social & Political Ideas of Some Great French Thinkers of the Age of Reason* (London, 1930), pp. 39-69. Bossuet wrote *La politique* for the Dauphin.

⁶⁰ Colbert was a bullionist, and like some of the writers already mentioned, opposed undue luxury when it resulted in the consumption or waste of bullion (Cole, *Colbert*, II, 543-48).

power, and of the opinion that the population of France was not growing as it might (chiefly because of war, pestilence, and misery), Colbert sought to accelerate the rate of population growth by means of measures intended to augment net immigration and to stimulate natural increase. Moreover, believing that population was a source of wealth and power only in so far as men were effectively employed, he also sought to bring about such employment.

Several policies were inaugurated to augment net immigration. That foreigners might be attracted to France, immigrant recruiting agents were sent abroad, naturalization requirements were reduced, and various privileges were extended to foreigners who came to France. Laws against emigration⁶¹ were tightened and extended, only movement to the colonies being permitted. In 1669 Colbert, having asserted that anyone born in France *ipso facto* assumed a lifelong obligation to the sovereign to remain in France and work, forbade French subjects to take service abroad, or to remove abroad under pain of "confiscation de corps et de biens." In 1681 the death penalty was combined with large rewards to informers to prevent emigration, in particular that of the persecuted Huguenots.

Colbert believed that if the volume of employment were expanded, the rate of population growth would become greater, and that if the population were prevented from engaging unduly in less important occupations, its usefulness would be increased. Therefore he tried to suppress idleness; to stimulate commerce and manufactures which (presumably because they were inherently more expansible than agriculture) could support "with facility an infinite number of subjects,"⁶² and to shunt as many

⁶¹ Emigration had been interdicted by Phillip the Fair and by Louis XIII (Schöne, *op. cit.*, pp. 82, 150). In the eighteenth century foreign agents who sought to recruit immigrants in France were subject to imprisonment (J. M. Mathorez, *Les étrangers en France sous l'ancien régime*, I, 57, 61-62).

⁶² Colbert did not neglect agriculture, however, for he recognized that a growing population could not be supported, and that recurring dearth could not be prevented, unless the supply of subsistence was increased. He did not try to suppress the price of grain in order to advantage manufacturing and urban populations; rather he sought to remove barriers to the interprovincial movement of grain, and to permit the export of grain when feasible. His disrepute in the eighteenth century was due, Cole states, to the development of faith in economic laissez faire and to an inadequate understanding of the problems that confronted Colbert. On Colbert's agricultural policy see Cole, *Colbert*, II, 502-43.

persons as possible into the four professions ("agriculture, trade, war on land, and that on sea") which would make Louis XIV "master of the world." That idleness might be diminished, he reduced the number of holy days, sought to prevent wasteful religious practices, encouraged the employment of children, inaugurated measures against vagabondage and mendicancy,⁶³ and in general tried to rationalize poor relief. To foster the development of commerce and manufactures, Colbert continued many mercantilistic policies already in effect and inaugurated a great number of measures designed to implement and perfect these policies and to convert the colonial empire of France into an integral and productive part of her national economic system.⁶⁴ To induce more persons to enter agriculture, trade, and the military profession, Colbert proposed restrictions on the number of persons engaging in law, finance, and the service of the Church. Of his contemplated measures for limiting the number of monks, nuns, and priests, only that (1666) requiring royal permission for the founding of new religious communities and for the continuation of communities founded after 1636 went into effect.⁶⁵ He considered regulating the dowry system so as to prevent it from delaying marriage or rendering it difficult.

Most important of Colbert's measures⁶⁶ to stimulate natural increase was that of 1666, designed to encourage marriage⁶⁷ and propagation. This measure, frequently approved by later writers, was based in part on the Roman laws praised by Bodin, in part upon tax exemption precedents set in France by Charles IX (1566) and in Burgundy by its rulers following the Hundred

⁶³ He ordered the orphans, beggars, and other destitute and unemployed poor to obtain employment and shelter in hospitals to be established in each community for this purpose.

⁶⁴ These policies are described in detail by Cole in his work on Colbert, cited above.

⁶⁵ His proposal to increase to 25 years the age for taking final religious vows was not realized until 1768, when the government limited the number of religious communities and raised the age for final vows to 18 for women and 25 for men. Priests, monks, and nuns numbered about 270,000 in 1667. By 1766, the enforcement of religious vows, irreligion, and the suppression of several establishments had reduced the number to about 200,000; in 1789 the number approximated 130,000 (Mathorez, *op. cit.*, I, 46-48).

⁶⁶ Besides the anticelibacy and other regulations described, Colbert supported contemporary public health and antiplague measures.

⁶⁷ "The license of the times," he said, was unfavorable to "marriages [which are] the fecund springs whence the strength and greatness of states are derived."

Years' War, and in part upon recommendations of two counselors appointed to study the problem.⁶⁸ Under the first provision of this act taxable subjects who married before the twentieth year were exempt from the *taille* and other taxes until the twenty-fifth year; if they married in their twenty-first year, they were exempt until the twenty-fourth year. Under the second, fathers of ten living legitimate children, or twelve dead and living,⁶⁹ were exempt from the *taille* and other public charges. Under the third provision, nobles ("the strongest support of the crown and in whose maintenance lies the main power of the state") who had twelve living legitimate children were allowed pensions of 2,000 livres; those with ten, 1,000 livres. By the fourth provision half the pensions granted nobles were extended, on the same conditions, to bourgeois who lived in free towns and were exempt from the *taille*; these bourgeois were also declared exempt from certain public duties. In 1667 the pensions were extended to all classes of subjects without distinction. Parties to non-Catholic and mixed marriages were declared ineligible for these pensions by Louis XIV (regulations of 1670 and 1680).

Colonial demography did not escape Colbert's attention. He frequently queried the colonial as well as the home intendants concerning demographic trends. The directors of the West India Company were informed in 1670 that the promotion of population growth in the colonies was one of their principal tasks. Colonial administrators were instructed to see that colonists married early, boys before the age of 20, girls before the age of 16. Boatloads of young French girls—girls from houses of correction and from rural districts—were sent to the colonies, and soldiers in the colonies were ordered, under penalty of punishment, to marry them, the instructions which accompanied the

⁶⁸ The two counselors could find no specific precedent for Colbert. They indicated, however, that increases and decreases in tax and other burdens could legally be employed to stimulate marriage and procreation. They recommended, further, as had the Roman legists and as did later French populationists, that marks of honor (e.g., knight-hoods, patents of nobility, high rank in assemblies) be conferred upon the married and the fertile, but Colbert rejected this recommendation and employed the pension scheme which he himself had sketched.

⁶⁹ Those killed in the King's service were counted as living, whereas children in the service of the Church were not counted at all under this provision or in those granting pensions. Colbert is alleged to have said that "religious" are "useless in this world, and very often devils in the next" (Cole, *Colbert*, II, 466).

boatloads almost amounting (according to Hecksher) to "instructions for human-breeding-studs" and mares. In 1669 the pension law of 1666 was made partly applicable to Canada. Fathers of large families were given preference with respect to town offices, small marriage premiums were provided for those marrying young, and fines were made imposable upon fathers of unmarried sons (20 and over) and daughters (16 and over).

Colbert's measure proved virtually fruitless. Bad administration of the edict and neglect of its terms led Colbert in 1683 to secure its revocation. Thereafter, despite complaints of depopulation and proposals to stimulate population growth,⁷⁰ only insignificant steps were taken.⁷¹ Moreover, measures unfavorable to Jews and to marriage on part of soldiers were introduced.⁷² After Colbert's death, religious bigotry, war, dearth, and disruption of the French economy by onerous taxation and other royal policies, served to reduce the population one seventh or

⁷⁰ E.g., in 1711 a French official advocated a bonus of 20 livres to each newly married couple because "it will supply subjects at a cheap price." Another complained that it was reprehensible to permit the death of children who might later procreate. See Hecksher, *op. cit.*, I, 161; also the populationist writers discussed below.

⁷¹ Until 1789 fathers of ten living children were occasionally exempted from the capitation tax; or, if noble, were sometimes granted pensions. Dowries were sometimes granted to a few poor girls of marriageable age. Married persons were allowed certain exemptions with respect to military service and the payment of certain taxes. In a recent well-documented study of government aid to large families in Normandy, 1764-86 (*Social Forces*, XVIII, 1940, 418-24), S. T. McCloy shows that while the Act of 1666 was not in force it was sometimes referred to in petitions for aid; that governmental officials stated that the government was interested in population growth; that in the généralité of Rouen at least twenty-six heads of large families, only one of whom was a noble, appealed to the state for aid, and that usually, finances permitting, aid was granted. Measures to prevent emigration were kept in force, but with little success (Mathorez, *op. cit.*, I, 88-89; Schöne, *op. cit.*, pp. 154-55, 210-13).

⁷² W. Roscher, *Political Economy* (New York, 1878), II, 347-61. On Colbert's policies see Cole, *Colbert*, II, 41-45, 463-72; Schöne, *op. cit.*, pp. 140-78, 261; Mathorez, *op. cit.*, I, 40, 46-49, 53-63, 83-88, 100-17, 374; Hecksher, *op. cit.*, I, 347-49; II, 46, 152-53, 160-69, 300-05; G. H. Hecht, *Colbert's Bevölkerungs- und Gewerbepolitik* (Tübingen, 1898); A. Puvilland, *Les doctrines de la population en France au XVIII^e siècle de 1695 à 1776* (Lyons, 1912), pp. 22 ff.; Colbert's opinions, edicts, etc., are given in P. Clément, *Lettres, instructions, et mémoires de Colbert* (Paris, 1861-70), and *Histoire de Colbert* (Paris, 1892); in G. B. Depping, *Correspondence administrative sous le règne de Louis XIV* (Paris, 1850-55); Isambert and others, *Recueil général des anciennes lois françaises depuis l'an 420 jusqu'à la révolution de 1789*, XVIII (Aug., 1661-Dec. 31, 1671), (Paris, 1829), pp. 90-93. On Colbert's efforts to build up the slave trade and his conception of the relation of colonies to the mother country see S. L. Mims, *Colbert's West India Policy* (New Haven, 1912). For a criticism of Colbert's population policies by a conditional Malthusian, see F. Joubleau, *Études sur Colbert* (Paris, 1856), I, 419-25.

more in the thirty-year period that ended in 1715, when Louis XIV at last died. In 1685 the king, inspired by the fanatical Catholic clergy, revoked the Edict of Nantes, which action, coupled with the persecution of the two preceding decades, cost France 500,000-1,000,000 Protestants. Between 1684 and 1714 war cost France at least two thirds of a million men, some of whom, however, were foreign mercenaries. Famine and emigration removed additional thousands.⁷³

(The closing years of the seventeenth century witnessed for the first time the formulation of opinions that bear certain earmarks of population theory, for this period saw the beginning of the revolt against the prevailing religious, economic, and political absolutism, whose very premises virtually precluded a scientific discussion of the causes and consequences of population growth. The diminution in numbers that took place in the latter part of the seventeenth century, and the evils to which this diminution was ascribed, gave rise to protests against the absolutistic system and to the assertion that the lot of the common man and of the agriculturalist must be improved if the population growth was to be restored.)

By the turn of the century there had begun to flow a stream of literature, critical of absolutism and of French fiscal policy and more or less favorable either to populousness as such or to the establishment of conditions favorable to populousness. For this flow a number of newly discovered conditions and beliefs were responsible: the growing influence of the doctrines of the antiabsolutistic English political theorists and of the French Protestants and "freethinkers";⁷⁴ the profound impression of agri-

⁷³ See my *France Faces Depopulation*, chap. i, for sources of data on losses. Boissonnade (*Le socialisme*, p. 157) states that the earlier religious wars and the plagues, etc., therewith associated, destroyed a million men.

⁷⁴ It is not my intent to trace and weigh the individual rivulets of thought that contributed to the undermining of absolutism in France—rivulets that had their origin in the differently grounded springs of protest of the nobility, the Huguenots, the bourgeoisie, and the humanitarians. As early as 1652 C. Joly (1607-1700) had asserted that the royal power, while divine in origin, was derived from the people and was therefore limited (*Recueil de maxims véritables et importantes pour l'institution du roy*). The mixture of rationalism, naturalism, and skepticism in Saint-Evremond (1613-1703), and the recognition of the influence of science by Fontenelle (1657-1757), contributed a mood uncongenial to absolutism of any sort. Cartesianism, when applied to problems in theology and morals by Bayle (1647-1706), acted as solvent upon religious and moral absolutism and served as a basis for the defense of tolerance. Whereas the pro-

cultural decadence created by the reports of the intendants (1698-1700);⁷⁵ the inability of the regionally and nationally regulated grain marketing institutions and arrangements to relieve localized dearths and famines;⁷⁶ the persistence of unemployment and the widespreadness of misery;⁷⁷ the inequitable distribution of the tax burden; the belief that population had diminished and

tests of some critics of the régime of Louis XIV were merely directed at the abuses of his system, rather than at the system itself, such protests nevertheless made more acceptable Huguenot P. Jurieu's (1637-1713) defense of popular sovereignty, religious liberty, and individual rights, and Boulainvilliers' view that *raison d'état* and divine right were not compatible with collective well-being. The whole body of protests made France congenial soil for the natural rights doctrine of Locke, whose works were accessible in France before 1700, and thus paved the way for the philosophes (D. Mornet, *French Thought in the Eighteenth Century*, New York, 1929, pp. 42-51; H. Sée, *L'évolution de la pensée politique au XVIII^e siècle*, Paris, 1925, pp. 9-51).

⁷⁵ See H. Taine, *The Ancient Régime*, pp. 329-73; Hazel Van Dyke Roberts, *Boisguilbert* (New York, 1935), pp. 3-10.

⁷⁶ For several centuries the internal and external grain trade of France had been the subject of continuous but changing local and national regulation and interprovincial conflict. Although the state was coming to be thought of more and more as an organism, and the administrators of the central government were gradually fashioning the many provinces into one political and economic unit, the localized medieval marketing machinery—adequate ordinarily but unsuited to crises—was only slowly transformed into a national marketing mechanism. If there was a dearth of grain in some localities, prohibitions against adequate export from localities with an abundance of grain prevented the granting of relief to dearth-ridden areas. Moreover, as Vauban indicates, the system of communications was deficient in various parts of the country. Given these circumstances, the fact that the poorer classes lacked purchasing power when local conditions were bad, and the additional fact that charity was not well organized, local dearth often gave rise to famines and later to fevers and epidemics, all of which would have been prevented by an efficient national grain marketing system. Concern over the adequacy of local grain supplies occasioned opposition to the export of grain to foreign countries. Throughout the eighteenth century the regulation of the grain trade was sharply debated and regulations were at times imposed, at times withdrawn. A number of writers as we shall see, believing population to be dependent upon subsistence, based their attitude toward regulation of the grain trade in part upon the alleged effect of such regulation upon population growth. For an account of the grain trade, 1400-1710, see A. P. Usher, *History of the Grain Trade in France* (Cambridge, 1913). For a summary account of the actual measures taken to regulate the grain trade in the eighteenth and preceding centuries see H. F. Rivière, *Précis historique et critique de la législation française sur le commerce des céréales et des mesures d'administration prises dans les temps de cherté* (Paris, 1859).

⁷⁷ Vauban, who possessed a wide knowledge of conditions, estimated that one tenth of the French population was reduced to mendicancy, one half was on the verge of mendicancy, three tenths were badly off and in debt; only a part of the remaining one tenth could afford alms; not over ten thousand families (comprising about one fourth of one per cent of the population) were well off. See Sebastien le Prestre, maréchal de Vauban, *Projet d'une dixme royale* (1708 ed.), Preface, also pp. 3-4, 96-97, 126, 130, 162-63. This work was suppressed two months after publication in 1707; the author died two weeks later. Vauban was a precursor of the physiocrats (G. Weulersse, *Le mouvement physiocratique en France*, hereinafter cited as Weulersse, Paris, 1910).

was diminishing; and the growing discrepancy between what the rising bourgeoisie wanted and what they were able to secure under an omniscient and mercantilistic state. It is from this critical stream, which continued through the century as abuses persisted and new values replaced old, that there sprang, on the one hand, (the eighteenth-century concern over depopulation, and, on the other, increasing emphasis upon the merits of *laissez faire* and a growing recognition of the supposedly mechanical nature of interindividual socioeconomic relations.)

The three major initial sources of this critical stream, in so far as population theory is concerned, were the works of François Fénelon (1651-1715), cleric and preceptor of the heir apparent;⁷⁸ Vauban (1633-1707), soldier and administrator; Pierre le Pesant Boisguillebert (1646-1714), Norman magistrate. Of lesser importance was Henri de Boulainvilliers (1658-1722), compiler of the reports of the intendants. Of these writers, each of whom believed the individual entitled to some happiness, only Fénelon and Vauban stressed populousness as good in itself and as an index of the soundness of governmental arrangements. Vauban and Boisguillebert apparently understood better than Boulainvilliers and Fénelon the factors on which population growth depends.

In his critical voyageur utopia, *Telemachus*,⁷⁹ Fénelon sup-

⁷⁸ Fénelon was responsible for inducing Louis XIV to "obtain from each intendant a complete summary of conditions in his generality, for the instruction of his royal charge." The memoir requesting this summary was inspired in part as to its form by Boisguillebert's description of abuses in his *Le detail de la France* in 1695 (H. Roberts, *Boisguillebert*, pp. 6-7). Fénelon, in his anonymous *Remonstrances à Louis XIV sur divers points de son administration* (1694), pointed out that both city and countryside were being depopulated by war and bad government which were destroying agriculture and commerce. Fénelon taught his royal charge that peace was important and that all foreigners who came to France and so desired should be allowed to become naturalized. Although he accepted the revocation of the Edict of Nantes, he came to recognize the need of recalling the Huguenots and founding social arrangements on tolerance. His espousal of quietism and his implied criticism of the king in *Adventures of Telemachus* (trans. ed., with an Introduction, by O. W. Wright, Boston, 1888) incurred for Fénelon the dislike of Louis XIV and Bossuet (*ibid.*, pp. 109-10; H. Sée, *Les idées . . . au XVIII^e siècle*, pp. 213, 217; R. A. Jones, in F. J. C. Hearnshaw, ed., *The Social & Political Ideas of Some Great Thinkers of the Age of Reason*, pp. 70-103).

⁷⁹ Fénelon's *Adventures de Télémaque* (1699) is, in so far as population theory is concerned, the most important of the fictitious and real travel narratives published in France in the seventeenth and eighteenth centuries and intended, much as was Tacitus' *Germania*, by means of description of the commendable physical and moral state of men living in foreign and in hypothetical countries, to expose the evils of France and Europe.

ported four propositions bearing upon population: (1) that populousness is an unmixed good and should be promoted; (2) that luxurious consumption and warlike activities should be suppressed; (3) that agricultural life should be stimulated, inasmuch as it is conducive to simplicity of life and to the development of a vigorous race; (4) that the artificing of luxuries, in whatever form, should be prevented, because such activities are inimical to agriculture and to the simple life. Fénelon's general outlook is suggested by his belief that a king can sustain no more irreparable loss than that of men, the source of his power and greatness, and by his assertion that "the genuine strength and true riches of a kingdom consist in the number of people, and the plenty of provision."⁸⁰

Fénelon, in part because he was influenced by classic Greek authors, opposed the founding of social life upon industry, censured luxurious living, and extolled the virtues of simple agricultural life. Luxurious consumption, he said, undermined the mores, checked population growth, and diminished a people's hardiness; but he did not clearly show, as did Cantillon later, that such consumption shunts resources out of subsistence-producing industries. So long as manners are simple, wants are few, subsistence is readily accessible, and men are inured to labor, uneffeminized by luxury, and monogamous and chaste, a population will remain healthy and robust and grow in number. When, on the contrary, conditions are such as to cause youth to languish in

In this literature, inspired in part by the great geographical discoveries of the fifteenth and sixteenth centuries, we find economic, religious, and political criticism, the theory of the "good savage" and beneficent "state of nature," germs of the theory of progress, etc. (G. Atkinson, *Les relations de voyages du XVIII^e siècle et l'évolution des idées*, Paris, n.d., after 1922). In these fictitious narratives, as well as in actual accounts of life in the new world, inequality and luxury were condemned, the right of each to live a happy life affirmed, youthful marriage advocated, the need of preserving the species asserted, celibacy (for whatever reason) rejected, eugenic selection and the importance of health stressed, breast feeding of children by mothers advocated, and mercenary wet nursing attacked (*ibid.*, pp. 41-42, 52, 56-60, 79-81, 105, 169, 184; Atkinson, *The Extraordinary Voyage in French Literature Before 1700*, New York, 1920, pp. 17, 21, 32, 53, 101-04, 108, 121-23, 164; *The Extraordinary Voyage in French Literature from 1700 to 1720*, Paris, 1922, pp. 27-28, 51, 58, 64, 80-81, 85, 88-90). Vauban, Fontenelle, and Montaigne were among those influenced by the actual travel literature (Atkinson, *Les relations . . .*, pp. 9, 12, 19-20, 101). On this general class of literature see also A. Lichtenberger, *Le socialisme au XVIII^e siècle* (Paris, 1895), chaps. ii, xii, xv.

⁸⁰ *Telemachus*, pp. 363, 512.

dejection and indigence, young people will "not dare marry for fear of increasing their distress."⁸¹ When the power of the prince is excessive, political conditions prejudicial to population growth tend to develop. When men give up simplicity and increase their wants, more resources are needed to support a given population, health is impaired, effeminacy spreads, manners are corrupted, jealousy and rebelliousness develop. Fénelon concluded, therefore, that the sale of foreign luxuries should be suppressed, and the pursuit of want-multiplying trades and arts curtailed or prohibited; and that agriculture, employment in which is conducive to the simple life and to the multiplication of a robust race of men, should be honored and stimulated.⁸²

An optimist with an "instinctive belief in evolution and progress,"⁸³ Fénelon did not fear overpopulation. Only once did he mention this possibility.⁸⁴ In general, he supposed that if men work hard and diligently the earth will be

inexhaustible, and will be more fruitful in proportion as it is cultivated by more hands: it will reward labor with boundless liberality. . . . The produce of the earth will always be in proportion to the number of persons that till it. . . . There will always be much more land than can be cultivated; and while any remains unappropriated by cultivation, we should think it folly to defend even our own against those who would invade it. [Foreigners, it is said, can be invited and incorporated into the population.]⁸⁵

Presumably, therefore, although he developed no wage theory, he believed a near subsistence wage to be adequate, and foresaw no changes which would (or ought to) raise wages above that level.

⁸¹ *Ibid.*, pp. 237, 293-94, 364.

⁸² *Ibid.*, pp. 237, 291, 353, 358, 360-61, 512-14. Although an aristocrat and monarchist, Fénelon seems to have favored an ideal agricultural communism. Presumably, however, even though he was a humanitarian, Fénelon did not believe that men would "naturally" act for the common good; for he advocated bestowal of honors upon the efficient agriculturalists, and infliction of punishment and tax burdens upon the inefficient.

⁸³ Séc, *Les idées . . . au XVII^e siècle*, p. 233. Bury (*op. cit.*, pp. 73-77), however, merely accredits Fénelon with believing that man's condition *could* be improved.

⁸⁴ "If, in a long course of years, the people should be so much increased that land cannot be found for them at home, they may be sent to form colonies abroad, which will be a new advantage to the mother country." At no time, however, does Fénelon consider it advisable to allot to a family any more land than is absolutely necessary to provide it with subsistence (but not with superfluities) (*Telemachus*, p. 362).

⁸⁵ *Ibid.*, pp. 294, 358, 468, 512.

Vauban, who has been called a humanitarian mercantilist, and whose views represent the beginning of the transition to a kind of liberal mercantilism, rejected the mercantilist opinion that money constitutes the principal form of wealth,⁸⁶ asserting instead that the true wealth of a kingdom consists in the abundance of provision necessary to the life and growth of population, and in the number of its citizens suited to engage in agriculture, manufactures, trade, the arts and sciences, and war. He conceived of the ideal state as populous and prosperous, and as ruled by a powerful, benevolent, enlightened monarch, interested primarily in the conservation and multiplication of his subjects. For "the grandeur of kings is measured by the number of their subjects; therein consists their welfare, their happiness, their wealth, their power, their fortune, & every consideration that they have in the world."⁸⁷ Vauban insisted, however, that number alone does not suffice; that a ruler's subjects, to be of maximum worth, must be employed, comfortable, and happy.

Tested by the standards laid down by Vauban, the policies of the French government were subject to criticism. Not only did France, with its estimated 19.1 millions⁸⁸ of inhabitants in 1700, contain less than four fifths as many people as could be supported;⁸⁹ it contained perhaps a half million less than a few years earlier.⁹⁰ For the prevailing situation—failure of population to

⁸⁶ Sée, *Les idées . . . au XVIII^e siècle*, p. 305; Mann, *op. cit.*, p. III.

⁸⁷ *Dixme royale*, p. 22; also similar statements in Mann, *op. cit.*, pp. III, 114-16, and in Silberman, *op. cit.*, pp. 42-45. Depopulation is "the greatest evil" which can afflict a kingdom (*Dixme*, p. 224). The king is to the state as the head is to the body and therefore suffers when the people are overtaxed and deprived of necessities (*ibid.*, p. 230).

⁸⁸ This figure Vauban derived from the reports of the intendants.

⁸⁹ On the assumption that one square league would support 850 persons, France's estimated 30,000 leagues could support at least 25,500,000. One square league could produce 2,104 setiers of grain and enough barley to raise the total to 2,630. Each person required about three setiers per year, children under ten, the aged, and the meat-eaters requiring less. This sum (2,630) would support 876 persons, but supplies for 26 persons needed to be deducted to allow for losses to rodents, feed for animals, etc. (*Dixme*, pp. 186, 197-98). He may even have supposed the population capacity to exceed 25,500,000; for in several places he indicates that density, not mere territorial and numerical extent, are significant, thus suggesting certain economies of conglomeration (*Journal des économistes*, 4th ser., XVIII, 1882, 330; Mann, *op. cit.*, pp. 115-16).

⁹⁰ Mann, *op. cit.*, p. 116; *Dixme*, p. 186. In parts of Normandy, one intendant reported, the population diminished one sixth in the closing years of the seventeenth century (C. Dubois, *R. H. S.*, XXI, 1933, 385-88).

grow, depopulation, emigration—three factors were responsible: war (he referred principally to the War of the Spanish Succession), poverty and famine, and fiscal abuses.⁹¹ Among the measures necessary, in his opinion, for the revival of population growth, Vauban included: encouragement of agriculture and augmentation of the food supply; restoration of peace and steps to reduce unavoidable war losses;⁹² removal of restrictions upon the internal movement of grain in order that localized dearth might be avoided; employment of religious property in a manner suited to benefit the nation, and elevation of the age for taking final religious vows to 25 or 30;⁹³ restriction of foreign imports to necessities and goods not producible in France;⁹⁴ replacement of the existing inequitable and extortionate tax system, which was impoverishing many, by a system which taxed everyone roughly in proportion to his capacity to pay.⁹⁵

Given freedom from political oppression and economic uncertainty, encouragement to agriculture, commerce, and industry, improvement of the means of communication, the removal of restrictions upon the internal grain trade, and a system of taxation that would take from each person only a specified and non-

⁹¹ *Dixme*, p. 186. Vauban, though an advocate of the recall of the Huguenots and aware of the volume of emigration occasioned by their persecution, did not list religious bigotry as a check, in part at least because he shared Boisguillebert's belief that the chief cause of the depressed economic state of France consisted in "the hemming in of the economic life of the people by a vicious fiscal and economic system" (Roberts, *op. cit.*, p. 107).

⁹² Vauban, in his works on warfare, emphasized the fact that able military leaders conserve their men (Mann, *op. cit.*, pp. 118-19). He sought, not to avert war entirely, but to render it more rare. He indicated that France should extend its domain only to its "natural frontiers"; and that France could best proceed against the Dutch and English by ruining their commerce (Silberner, *op. cit.*, pp. 42-47).

⁹³ *Journal des économistes*, 4th ser., XVIII (1882), 329-30, 332.

⁹⁴ Silberner, *op. cit.*, pp. 39-40.

⁹⁵ *Dixme*, pp. 57, 206, 236-37. Most of this work is devoted to the description of a new tax system which, he estimated, would yield as much as, or more than, the prevailing system. Although Vauban wanted the unproductive population limited and the producers increased in number, he did not exempt any class from taxation, for he believed every subject to be under a natural obligation to contribute. Specifically, he advocated a proportional tax, never to exceed 10 per cent, on the gross produce of the soil, on rents, and on other incomes; also taxes on luxuries, salt, and certain other commodities. Even laborers who then got only a subsistence wage were to pay a tax of 3.33 per cent. Vauban indicated, however, that if the number of holidays were cut from 30 to 15, the laborers could earn more than enough above what they were already earning to pay the tax (*ibid.*, pp. 99-100).

changeable proportion of his income, everyone would take more interest in his business or work, unemployment would decline, goods would increase and be available where needed, and famine and misery would disappear. All would eat and dress better. Marriages would take place earlier and in greater number, children would be better reared and healthier, and the population would grow in number and quality.⁹⁶ An advocate of colonial expansion, Vauban noted elsewhere that were a few battalions sent to Canada, the basal population would multiply to 100,000 by 1730, and double every thirty years thereafter to number 51.2 millions by the year 2000.⁹⁷

Boisguillebert, who had learned (much as had his friend, Vauban) of the condition of the people in his capacity as administrator, was essentially a humanitarian who, despite his leanings toward agricultural protectionism, had shaken off much of mercantilism. He attributed the retardation of French population growth to widespread poverty, traceable to fiscal and other restrictions upon economic activity. Men, he pointed out, must enjoy at least a minimum subsistence income if they are to escape premature death and remain disposed to work hard. In parts of France men were not receiving this minimum, for in some places as many as half the newborn died in infancy and many adults were cut down by death before life had run half its course. "Extreme poverty," he remarked, "causes the diminution of families to be regarded as a blessing, and . . . this situation [poverty and burdensomeness of families] carries with it the means of procuring [this diminution]."

Boisguillebert pointed to defective distribution and to restrictions upon economic freedom as the immediate causes of poverty and the primary source of economic ills. Were liberty of enterprise permitted in agriculture and commerce, and were the moral and economic condition of the working class improved, the fund of subsistence would grow and men would multiply. Accordingly, he advocated not only augmentation of the land under

⁹⁶ *Dixme*, pp. 22, 198, 235-36.

⁹⁷ Mann, *op. cit.*, p. 59; also pp. 57-63 on the development of Canada, Louisiana, and Santo Domingo. Vauban preferred sending to the colonies only those who would marry at an early age (*ibid.*, p. 116).

tillage and improvement in the methods of cultivation, but also suppression of the guilds and other institutions by which prices were fixed, removal of conditions prejudicial to agriculture, and reduction of the tax burden incident upon and restrictive of agriculture and industry. He rejected in part the tax system proposed by Vauban, for he believed that no one should pay taxes until he enjoyed adequate subsistence. He believed that the masses were entitled to some superfluities in addition to subsistence, and that workers would be stronger and more efficient if they received a sufficiency of food. While he never considered the possibility of future overpopulation, he indicated that agricultural reforms would double France's population capacity. In short, he anticipated (as did Vauban) the thesis of Malthus that population growth is dependent upon the food supply, the views of later advocates of agricultural reform and of the humane treatment of labor, and the laissez-faire philosophy of the late eighteenth-century writers. Although Boisguillebert came close to outlining a Ricardian theory of rent, and clearly recognized that subsistence sets a lower limit to wages, his interest in specific reforms precluded his developing a complete and self-consistent body of doctrine such as Adam Smith later evolved.

Of wages in general Boisguillebert had more to say than his French contemporaries, but on wage differentials he was silent. Wage variations, he believed, had their origins in fluctuations in agriculture, in especial in fluctuations in grain yields and prices. There existed a kind of equilibrium level toward which wages tended. If workers received in excess of this equilibrium amount—presumably enough to enable them and their families to exist in some comfort—, they tended to work less, and, being free of immediate want, to demand even more; wherefore production and employment fell off and prices rose, until the exhaustion of food supplies pressed wages back to the normal level. Of infra-equilibrium wages he said little except to imply that migration, labor strife, and a possible reduction in numbers would operate to push such wages upward. Believing in general that the community tended to be most prosperous when wages were at this equilibrium level, Boisguillebert condemned artificial wage controls, but

failed to indicate whether or not this equilibrium level might rise through time.⁹⁸

Boulainvilliers' views were, in essence, a mixture of the views of Fénelon, Vauban, and Boisguillebert. Sharing Fénelon's belief that the influence of the aristocracy must be restored, Boulainvilliers worked for the improvement of the lot of the old nobility and the revival of certain feudal values.⁹⁹ He shared the humanitarianism and the somewhat antimercantilistic sentiments of Vauban and Boisguillebert. He agreed with all three that the condition of the masses, particularly that of the peasants, must be improved. In his indifference to, and criticism of, the established religion, he anticipated the philosophes. The power of the state, Boulainvilliers believed, depended upon its having happy and comfortable subjects and a great number of common people—in his opinion, the most useful class of the state and the source of the nation's labor supply and soldiers; upon the existence of respect for the rights and liberties of individuals; and upon the absence of absolutism. Like Vauban and Boisguillebert, he favored fiscal reforms, because he saw in the removal of certain of the burdens and inequalities in the tax system a means of checking rural depopulation and emigration from France, and of attracting expatriates and foreigners to France. He was favorably disposed to the imposition of heavier taxes upon celibates than upon the mar-

⁹⁸ See Roberts, *Boisguillebert*, esp. pp. 26-27, 35, 166, 170, 175-76, 191, 196, 238, 247, 254-55, 267-68, 288, 289, 314-16; Puvilland, *op. cit.*, pp. 40-42; Boisguillebert's works reprinted in E. Daire (ed.), *Économistes financiers du XVIII^e siècle* (2d ed., Paris, 1851), esp. pp. 164, 200, 236-37, 367-69. Boisguillebert's main works are *Le detail de la France* (1695) and three studies written between 1700 and 1707, but first published in 1707: *Factum de la France*, *Traité des grains*, and *Dissertation sur la nature des richesses*. Whereas Vauban's *Dixme royale* was suppressed, Boisguillebert's works finally cost him his administrative post. Boisguillebert apparently knew the voyageur literature referred to above; like Rousseau later, he believed that in the state of nature men at least had sufficient subsistence; unlike Fénelon, he believed men to be dominated by self-interest and therefore rejected Fénelon's implicit communism (Roberts, *op. cit.*, pp. 168, 186-87, 240-41). E. Antonelli (*R. d. e. p.*, XXIV, 1910, 532 n.) accredits Boisguillebert with a vague conception of the law of diminishing returns (*Traité des grains*, chap. iii, where he discusses the influence of the price of grain upon the extent of cultivation).

⁹⁹ Saint-Simon, who, like Boulainvilliers, desired an increase in the power of the nobility, opposed the persecution of the Protestants and recommended the restriction of the number of religious. Persecution of the Protestants, he said, had depeopled a fourth of the realm. Excessive religious celibacy deprived the state of both posterity and the services of the celibates (Schöne, *op. cit.*, pp. 149-50, 177-78; Saint-Simon, *Projets du gouvernement*, Mesnard ed., Paris, 1860, pp. 15-16).

ried as a means of stimulating the economic life of the country and relieving the prevailing misery. He recommended the establishment in all communities of *bourses de commerce*, whose functions included: (1) the aiding of industry, agriculture, and commerce; (2) the provision of relief for the disabled, of employment for the able-bodied, and of education for the children of artisans and workers; (3) the collection from each worker of one fifth of his wage, half to go to the state as a tax and half into a reserve fund for the succor of the aged, the sick, and the unemployed.¹⁰⁰

Family limitation, but not population problems, received some attention at the hands of Pierre Bayle (1674-1706), whose philosophical writings contributed far more than the works of Vauban and Boisguillebert to the destruction of the social system that was visiting misery upon the French masses.¹⁰¹ In a review of the work of Vossius¹⁰² Bayle said that Vossius' population estimate for France was too low, and that for the world too large, but he accepted Vossius' opinion that Italy, Sicily, and Greece were less populous than formerly.¹⁰³ He seems to have looked upon ecclesiastical celibacy as unfavorable both to morals and to the state.¹⁰⁴ He commented on the great frequency of infanticide, abortion, and prevention of conception in Paris, "a city . . . less impure" than "the greatest of the capital cities of the West."¹⁰⁵ The "art of abortion" had greatly improved in response to the growing demand, he said, adding that many women "use precaution betimes,

¹⁰⁰ *État de la France* (London, 1727); *Mémoires présentés à Monseigneur le Duc d'Orléans* (Amsterdam, 1727); Roberts, *op. cit.*, pp. 5-8; Sée, *L'évolution . . . au XVIII^e siècle*, pp. 30-32; *Les idées . . . au XVII^e siècle*, pp. 279-83. Villeneuve and others later proposed a savings reserve fund somewhat similar to that of Boulainvilliers. The latter estimated the French population at twenty millions.

¹⁰¹ H. Robinson, *Bayle the Sceptic* (New York, 1931).

¹⁰² I. Vossius, *Variorum Observationum Liber* (London, 1685). Vossius estimated the population of the world at five hundred millions, that of Europe at thirty, and that of France at five.

¹⁰³ *Œuvres diverses de Mr. Pierre Bayle* (Hague, 1737), I, 212-14. Bayle's review appeared in 1685.

¹⁰⁴ *The Dictionary Historical and Critical of Mr. Peter Bayle* (2d ed., London, 1738), II, 174; III, 344-45; see also *Œuvres*, under "célibat" and "mariage."

¹⁰⁵ Limbo must be very large, he said, to accommodate those who die without baptism in consequence of abortion and miscarriage ("Patin," *Dictionary*, IV, 498-502). Guy Patin (1601-1672), the well-known physician, had commented on the frequency of abortion in Paris and on the evil effects of "sacred celibacy" (F. R. Packard, *Guy Patin*, New York, 1925, pp. 271-74, 297, 304).

and before the soul be arrived." The practice of using "preservatives to keep themselves from being with child" was more common among sixteenth-century women, he believed, than among the women of ancient Rome, and it had increased in the seventeenth century. Yet, despite this growth in the use of "preservatives . . . to hinder . . . conception," many women still resorted to the grosser methods of inducing abortion.¹⁰⁶ The "force of shame" motivated pregnant unmarried women to have recourse to abortion and infanticide, however dangerous. Both married and unmarried women, anxious "to preserve their good shapes," resorted to abortion and "preservatives." Married women were governed also by the desire "to save expences."¹⁰⁷ Bayle anticipated some of Mandeville's views on luxury, views which were often incorporated in later discussions of population and economic problems.¹⁰⁸

Perhaps the most extensive treatment—albeit a noninfluential treatment—of questions of population in the late seventeenth century was that of M. de Belesbat¹⁰⁹ (d. 1706), whose views reflect the dissolution of the older type of mercantilism and represent the transition to the liberal mercantilism common in the eighteenth century. Belesbat's views were both forward- and backward-looking. On the one hand, he defended political absolutism and Gallicanism, rejecting the church-state dualism of the medieval and early modern period. The interests of the prince and his subjects were one, and most susceptible of realization under benevolent absolutism; for absolutism was in complete consistence with the "natural laws" of God, which were readily knowable through reason. Rights, such as those of property, derived from the prince; they were not natural. On the other hand, Belesbat defended mercantilism only in part, supporting

¹⁰⁶ "Patin," *Dictionary*, pp. 500, 503.

¹⁰⁷ *Ibid.*, pp. 499-501, 503. Some married women "made no scruple to wear busks, at the expence of the child that was in their womb, and that they might not lose the honour of having genteel shapes, they made no conscience of destroying" the fruits of their womb. Wrinkles on the belly are "much more to be feared, than the wrinkles of the face" (*ibid.*, p. 502). See also Robinson, *Bayle*, pp. 181-85, for Bayle's views on prostitution and his criticism of loose morality.

¹⁰⁸ Robinson, *Bayle*, pp. 185, 259-61. See also Chapter IV, below.

¹⁰⁹ Belesbat's works, without great influence because in manuscript form, were summarized in 1906 by A. Schatz and R. Caillemer (*R. d. e. p.*, XX, 1906).

commercial liberty and advocating better conditions for the common man and for certain of the aristocracy.¹¹⁰

Belesbat reasoned, as had many before him, that the wealth and grandeur and power of the king depended primarily upon the number of his subjects.

The more peopled a kingdom is, the more are there of taxpayers, the greater is consumption, and the money that the king draws. . . . Princes are powerful only in consequence of the great number of men that they command, and not at all because of their wealth and the extent of their states. . . . The wealth of princes comes from the fertility of their States; fertility, from good cultivation; good cultivation, from the great number of men who are employed therein. Consequently princes who know their true interests will do everything to conserve and augment the number of their subjects, to enrich them and render them happy.¹¹¹

France needed to pursue two courses of action to become powerful: (1) to exchange her surplus products for foreign gold and silver; (2) to stimulate population growth and thereby assure herself of an adequate supply of troops in time of war, and of workers to cultivate her land and enrich the nation.¹¹²

Belesbat listed a number of factors responsible for the past diminution in the nation's population, and for its current failure to increase: the great misery of the people, which restricted their capacity and willingness to raise children; great mortality among the sick and the orphans who were commonly without succor; great mortality in the families of workers, traceable to unemployment and resultant want; the great number of male and female religious; religious persecution; the decline of commerce; failure to accord fair treatment to foreign immigrants; bad administration of justice; the high price of grain; lack of relief for the

¹¹⁰ *Ibid.*, pp. 635-42, 791-815. In his discussion of child training he indicated that children belonged to the state in greater measure than to the family (*ibid.*, p. 793).

¹¹¹ *Ibid.*, pp. 44-45, 631. He pointed to the demographic and economic decay of Turkey and Spain as evidence of the failure of rulers to take care to augment and conserve their populations.

¹¹² *Ibid.*, p. 387, also pp. 40-44, on the importance of gold and silver. Whereas Boisguillebert believed that war (particularly if short) did not injure a nation, but rather animated it and rid it of "peccant humors," Belesbat noted that war had cost France an "infinity of men"; the latter was more aware, too, of international economic interdependence (Silberner, *op. cit.*, pp. 45-46, 48-51).

needy; heavy losses (over five hundred thousand men) occasioned by war and by incompetent administration of military hospitals. Most responsible for the recent decline in numbers, he believed, were the persecutions of the Protestants and the widespread poverty and misery of the population.¹¹³

Belesbat outlined five courses of action intended to eliminate obstacles to population growth; reform of the hospital and indigent-relief systems; reform of religious institutions; re-establishment of religious tolerance; efficient administration of the grain trade; and commercial liberty. He recommended that the military hospital organization be completely overhauled and that there be established a system of public assistance which distinguished between able-bodied unemployed persons and the more or less helpless indigents (i.e., orphans, sick, and aged). For the unemployed able-bodied males he proposed public workhouses and state projects, saying that if each unemployed able-bodied male were compelled under threat of severe punishment to seek employment with the state, or parish, or municipality, vagabondage and beggary could be stamped out, and the state could obtain canals, roads, etc., at small cost. For the relief of orphans and indigents unable to earn a living, Belesbat recommended the establishment in each diocese of a hospital or refuge; and for the indigent sick, separate care, supported by charity.¹¹⁴ He supposed that the state could finance his proposed broad system of relief by taking over the bulk of the revenues of ecclesiastical institutions and using them to meet the costs of the system.¹¹⁵

Belesbat's proposed religious reforms resembled those of his

¹¹³ *Ibid.*, p. 48.

¹¹⁴ *Ibid.*, pp. 52-53. Belesbat disapproved, as did many of his contemporaries, of haphazard, unsupervised charity. Although, in most of his memoirs, he proposed that the funds of each parish be used locally, in one memoir he advocated that all funds destined for charity be concentrated in the hands of the state and then redistributed where needed (*ibid.*, pp. 53, 62-63).

¹¹⁵ Belesbat also mentions periodic church collections as a source of funds (*ibid.*, pp. 56-60). In the sixteenth century the appropriation of church property was at times recommended as a means of meeting certain state expenditures. In general, Belesbat's proposals were not original, workhouses having been proposed and built in the late seventeenth century, hospitals having been authorized but not built, and decrees against vagabondage and mendicancy having been issued (*ibid.*, pp. 53-60). Belesbat not only looked upon a capitation tax as a last resort for a hard-pressed state, but also proposed an upper limit of 150 livres in contrast to the 2,000 maximum actually adopted in 1695 (*ibid.*, pp. 812-13).

contemporaries who were opposed to religious intolerance, to undue religious celibacy, and to the passage of property into the hands of religious institutions. He advocated revocation of anti-Protestant measures, so that the Protestants, to whom France owed much of her grandeur, might return and remain; that religious, who had entered orders before attaining their majority, be permitted to quit the orders and inherit property as individuals; and that the age for taking final religious vows be raised (for others than daughters of nobles) to twenty for women and twenty-five for men.¹¹⁶

Belesbat favored, as had other French writers during the preceding century, a somewhat modified system of internal and external commercial liberty. Colbertism, he said, not only involved maladroit regulation, but was contrary to the dictates of human nature and the interests of France.¹¹⁷ Commercial liberty would attract foreigners, especially merchants, to France.¹¹⁸ Moreover, it would provide a market for goods of which France had a superfluity, given her then population, and thus serve to draw to France the gold and precious metals of foreign lands, the possession and circulation of which in France would make her prosperous and powerful.¹¹⁹

Despite his defense of commercial liberty in general, and despite his belief that France, if well cultivated, could produce half again as many provisions as her then population could consume,¹²⁰ Belesbat believed that efficient administration of the grain trade was necessary if all were to be assured a sufficiency of grain at a satisfactory price. Grain deficiencies—deficiencies responsible, according to Belesbat, for much misery—were attributable not to national shortages of grain, but to the maldistribution of grain supplies within France and to the export of grain in times of stress. Belesbat advocated, therefore, that the maximum price be fixed at about 20 livres per setier; that a differential tax be used to equalize regional prices and thus cause the grain to flow in the correct proportions to all parts of France; that pre-

¹¹⁶ *Ibid.*, pp. 46-49, 51.

¹¹⁷ *Ibid.*, pp. 36-37, 391-96, 561.

¹¹⁸ *Ibid.*, pp. 46, 631-32.

¹¹⁹ *Ibid.*, pp. 40-44, 387, 631-33. Belesbat did not look upon trade as a form of combat, however, for he emphasized the interdependence of nations (*ibid.*, p. 573).

¹²⁰ *Ibid.*, pp. 387, 631-32.

miums be granted to grain importers in times of stress; and that grain exports not be permitted so long as the available supply fell short of two years of national consumption.¹²¹

Belesbat apparently supposed that, given the reforms proposed by him, the population would increase at least 50 per cent. Whether he supposed that food imports might swell it beyond this level is not apparent.

Our journey through the morass of pre-eighteenth-century French politicoeconomic thought has revealed nothing resembling full-bodied population theory. Most of the pronouncements on population consisted of assertions that population growth was good and desirable, because such growth was believed to contribute to the collective wealth and strength of the state. This presumption, however, amounted to a mere a priori supposition in the hands of its exponents; for none examined carefully, and demonstrated the nature of, the relationship between growth of population and growth of politicoeconomic power, or indicated the limits, if any, to the presumptive validity of the proposition that population growth is good and desirable. Of the determinants of population growth there was little discussion until the close of the seventeenth century, when protestants against religious absolutism and its effects began to demonstrate that human population would grow only in a favorable medium—in a medium of peace, tolerance, and plenitude of the essentials of life. Of the consequences of population growth for the different social classes there was virtually no analysis.

Of wage theory, originally an outgrowth of population theory, there was nothing in pre-1700 France other than the vague notion that wages did not tend to rise above the subsistence level and could not remain below it, and that the money price of labor moved with that of grain.¹²² Those who advocated very low wage rates on the ground that more work would then be forthcoming simply postulated a low and constant standard of living. The few who believed that men would put forth more effort if they were

¹²¹ *Ibid.*, pp. 63-70.

¹²² In the late seventeenth and early eighteenth centuries it was commonly held, in discussions of importation from India and Persia, that labor in these countries cost very little, inasmuch as the inhabitants had hardly any need but rice, which was abundant and cheap (E. Depitre, *R. H. S.*, IV, 1911, 365).

better paid presupposed an expansible standard of living, but built no wage theory on this presupposition.¹²³

The lack of development of population and wage theory in France prior to the eighteenth century is primarily attributable to the climate of opinion and to the competition-restricting institutional framework of the French economy. The political, economic, and religious absolutism then prevailing tended to check discussion of population and wage problems, directly through the coercion of opinion, and indirectly through the precipitation of the more basic questions of religious, economic, and political liberty.¹²⁴ The upper-class bias and value scale of most of the writers on population virtually precluded their approaching demographic problems as did the later humanitarian writers. Finally, the noncompetitive mien of the French economy tended to obscure the working of the competitive processes *within* this economy, and thus delayed the metamorphosis of factual observations into even as consistent a body of theory as Boisguillebert developed.

¹²³ Despite the fact that the Colbertian state approximated a quasi-slave economy, the question appropriate to a slave economy was not asked, viz.: What level of remuneration will maximize the "surplus value" derivable from the slave?

¹²⁴ It is not without significance that Bayle's *Dictionnaire historique et critique* (1697), probably the most influential book of the century, contained no specific treatment of population and wage theory, as did later encyclopedias and dictionaries.

CHAPTER II

THE NEOMERCANTILISTS AND THE AGRARIANS

THE LITERATURE dealing with population and labor problems in eighteenth-century France took most of its color from the indigenous intellectual climate and from the physical circumstances in which the vast majority of the population found itself. "Above all," writes Lichtenberger, "the eighteenth century is a reaction against the epoch of Louis XIV"¹—against religious and political and economic absolutism, against clericalism, feudalism, and narrow nationalism, against enslavement to tradition, and against arbitrary governmental interference in private affairs. The social literature of this century was in essence, therefore, a literature of protest and reform; in it flowered the political, economic, and religious liberalism that had as its climax the Revolution of 1789 and the final destruction of the *ancien régime* with its juridical distinction between classes and its privileged minorities.

I

The eighteenth-century literature of protest and reform had its origin in large measure in the physical circumstances of the people. True, eighteenth-century rationalism and its corollaries, respect for science and belief in continual human progress, were natural outgrowths of the philosophy of Descartes and the skepticism of Bayle and Fontenelle. True, the sentimentalism and romanticism of men like Rousseau had antecedents in the religious quietism of the seventeenth century and in certain of the writings of Molière, La Fontaine, Saint-Evremond, and others. Even the doctrine that men were naturally equal and ought therefore to enjoy equality—an idea that did not take hold until after 1750²—derived in part from simple Christianity and Lockian psychology.³ Nonetheless, it was the breakdown of govern-

¹ A. Lichtenberger, *Le socialisme au XVIII^e siècle*, p. 2.

² *Ibid.*, p. 33.

³ For accounts of the origins and development of eighteenth-century thought see K. Martin, *French Liberal Thought in the Eighteenth Century* (Boston, 1929); D. Mor-net, *French Thought in the Eighteenth Century*, trans. L. M. Levin (New York, 1929),

ment and the disrepute into which it fell that made possible the growth and spread of the doctrine of popular rights and the ideas of the eighteenth-century writers. The disrepute in which the government came to be held had its origin initially in the economic and fiscal shortcomings of the administration of Louis XIV and in the then distress of the people; it persisted because misery remained the lot of large sections of the population throughout most of the eighteenth century. The ideas of many of the eighteenth-century writers on population and labor problems were shaped in large measure, as were the reforms proposed by these writers, by this persistent distress and by what seemed to be its causes.

That the condition of all but a few was precarious when not miserable is evident from the situation of the bulk of the population in the second half of the century after some improvement had taken place. At the time of the French Revolution France "was one of the most densely populated countries of Europe,"⁴ and the average income was low. The incomes of the bulk of the population provided little more than bare subsistence at best; for the ownership of wealth was highly concentrated,⁵ and its privileged possessors, the nobility and the clergy, enjoyed large incomes from feudal dues, state pensions, etc., and tithes, and were exempt from most of the taxes and burdens incident upon the nonprivileged classes.⁶

and *Les origines intellectuelles de la Révolution Française* (Paris, 1933); H. J. Laski, "The Age of Reason," in F. J. C. Hearnshaw (ed.), *The Social & Political Ideas of Some Great French Thinkers of the Age of Reason*; Lichtenberger, *op. cit.*; J. B. Bury, *Progress*; J. Delvaile, *Progrès*.

⁴ H. Sée, *Economic and Social Conditions in France During the Eighteenth Century* (New York, 1931), p. 9. Competent historians find in population pressure one of the ultimate causes of the French Revolution. E.g., see L. Knowles, *Economic Journal*, XXIX (1919), 21; also below, Chapter VII, n. 236.

⁵ The king and the privileged classes, constituting less than 3 per cent of the population, owned 60-67 per cent of the land, according to Bourgin. The urban bourgeoisie owned as much as one sixth in some sections (G. Bourgin, "L'agriculture, la classe paysanne et la révolution française," *R. H. S.*, IV, 1911, 159-60; Sée, *Economic . . . Conditions*, pp. 2-3, 6). Sée (*ibid.*, pp. 60, 87) estimates the number of priests at 71,000; the monks and nuns at 60,000; the nobility at about 80,000 families numbering 400,000 persons. The peasants, comprising 90 per cent of the owners of land, owned a disproportionately small amount, their holdings ranging, Sée states (*ibid.*, pp. 4-5), from one fifth in some sections to one half in others. Feudal dues and taxes encumbered this land.

⁶ Sée, *op. cit.*, pp. 22-27, 61-62, 89. The condition of the relatively numerous

The lot of most of those who lived in rural areas—more than three quarters of the population—was miserable. A large proportion of the peasants—in some sections, 90 per cent—owned less land than was necessary for the support of a family; like the landless, they had to till the land of others on shares or work as hired laborers in agriculture and in rural industry.⁷ Neither alternative was attractive, however. While rural industry expanded, it did not expand rapidly enough to absorb the rural job-seekers, and it offered very low wages.⁸ The agricultural day laborers as a rule earned only subsistence even when times were good.⁹ This “rural proletariat, . . . reduced to misery by lack of work and poverty,” suffered unduly whenever there was a crisis or an epidemic, for such charitable institutions as existed were powerless to render much aid; wherefore it contributed the greatest number of beggars and vagabonds.¹⁰ The lot of the peasants with sufficient land to support a family, while slightly better than that of rural inhabitants with little or no land, was hard. “The average income of the French peasant at the end of the eighteenth century,” Bourgin¹¹ concludes, was “slight.” His “material existence . . . was still quite miserable,” Sée finds.¹²

Several factors served to aggravate the condition of the agriculturalist. His tax burden was unusually heavy, taxes taking one third to four fifths of his income. The feudal dues sometimes took another tenth.¹³ A considerable amount of land was withheld from cultivation, some for hunting purposes, and a great deal of damage was done to peasants' crops by the hounds and the protected wild game.¹⁴ Finally, agricultural methods remained primitive. The peasants who were responsible for the tillage of their own land and that of the proprietors were igno-

lower clergy and poor rural nobility frequently was not even comfortable, however (*ibid.*, pp. 74, 102-04).

⁷ *Ibid.*, pp. 5, 34. About one million agricultural workers still lived in feudal servitude a decade before the Revolution (*ibid.*, 14-15).

⁸ *Ibid.*, pp. 34-35, 163.

⁹ *Ibid.*, pp. 20, 211-13.

¹⁰ *Ibid.*, pp. 5, 20, 38-43, 211-13.

¹¹ *Op. cit.*, R. H. S., IV, 162.

¹² *Economic . . . Conditions*, p. 36; see also Taine, *Ancient Régime*, pp. 329-48, and Renard and Weulersse, *op. cit.*, pp. 236-47.

¹³ Sée, *Economic . . . Conditions*, pp. 23-28; Bourgin, *loc. cit.*, p. 162. On the tax and feudal burden see also Taine, *Ancient Régime*, pp. 16-26, 349-73, 404-10.

¹⁴ Taine, *op. cit.*, pp. 50-59; Sée, *Economic . . . Conditions*, pp. 22, 29. The peasants opposed clearing the wasteland, for they used it, albeit inefficiently (*ibid.*, p. 31).

rant,¹⁵ indolent, and without sufficient incentive or power to adopt better methods. There was no large-scale exploitation, the size of the cultivated parcels varying widely. Few of the great proprietors gave attention to agronomy. When, after 1760, agricultural societies were established and the government sought to stimulate improvement in agricultural methods and practices, only some of the great proprietors and the well-to-do farmers responded.¹⁶

The condition of the urban working classes was little better than that of the rural population in the eighteenth century. Although petty industry predominated, and the guild system still existed, the lot of the urban worker was hard and precarious. Mastership became "almost a family monopoly," and the aim of the guilds became the preservation of the collective monopolies of masters in given trades. The lot of the apprentice was onerous. Journeymen could seldom rise above their station. The wages of journeymen and artisans were so low that every crisis reduced many to mendicity. Even among the masters there were many who lived in misery. Although conditions improved somewhat in the last quarter-century of the *ancien régime*—a period in which the fiscal requirements of the government, Turgot's anti-guild edict, and the English trade treaty of 1786 nearly destroyed the moribund *régime corporatif*—the lot of the urban worker remained difficult upon the eve of the Revolution that finally suppressed the ancient restrictive system.¹⁷

II

In Chapter I it was shown not only that the policies of Louis XIV were occasioning distress in the closing years of the seventeenth century, but also that a few writers were beginning to protest these policies and to charge that they were producing depopulation. In the closing years (1700-1715) of the reign of Louis XIV the distresses of the population increased. Moreover, even though economic conditions improved in the reign (1715-

¹⁵ The great majority could not read or write (Sée, *op. cit.*, pp. 48-49).

¹⁶ *Ibid.*, pp. 14-19, 29-34.

¹⁷ *Ibid.*, pp. 121-34, 165, 175-87; E. C. Lodge, *Sully, Colbert and Turgot*, chaps. x-xiii; E. Levasseur, *Histoire des classes ouvrières*, II (Paris, 1901), 380-421, and Bk. VII; Renard and Weulersse, *op. cit.*, pp. 185-205.

1774) of Louis XV, the lot of the masses remained hard, as has been shown in the preceding section, and it began to be asserted that the population of France was not growing. All of the writers whose works are treated in this chapter and many of the writers whose works are discussed in later chapters were interested in restoring economic prosperity to France and creating conditions favorable to population growth.

Two somewhat diverse veins of opinion run through the works of the principal pre-eighteenth-century writers described in Chapter I. Sully and his disciples believed that a nation's power and prosperity are founded upon agriculture, and that stimulation of agriculture constitutes the most effective means of improving the economic condition of a people and facilitating their increase. Laffemas and his disciples, on the contrary, believed manufacturing to be the primary source of national prosperity. Manufactures attract a net influx of foreign money and bullion into a state and thus strengthen it; the circulation of these new increments of money activates the economy, expands employment, and favors population growth. These same two veins of opinion continued to be prominent in French economic literature until shortly after the middle of the eighteenth century; for while the works of Montesquieu gave new directions to socio-economic thinking, it was not until after the appearance of the works of Quesnay that new thought-determining points of departure became clear and explicit.

The writers treated in this chapter do not divide, in their attitudes toward war, in quite the same manner as in their attitudes toward agriculture. Dutot was more nearly in the earlier mercantilist tradition; for he emphasized that Holland and England were France's rivals, and that their power could best be dissipated through French concentration upon the development of a powerful navy and merchant marine. Herbert and (in lesser measure) Belial des Vertus, though agrarians, manifest a certain amount of mercantilistic bellicoseness. Melon, unlike his mercantilist predecessors, asserted that commerce made for international harmony, and that war injured nations and, therefore, could be sanctioned only as a last resort. Argenson, though at

times bellicose, looked with favor upon freedom of trade and efforts to establish peaceful relations between all Christian nations. Goudar, while not opposed to war under all circumstances, stressed the utility of peace. On the whole, a number of the writers dealt with in this chapter reject the mercantilist doctrine that states are natural enemies, and that commercial, and population, and other policies must be founded upon acceptance of this principle; in essence their writings reflect the gradual shift toward the physiocratic and late eighteenth-century liberal conception of international relations.

The depressed state of economic affairs during the period of the Regency (1715-1723) provided John Law (1671-1729) with an opportunity to apply his theories, and contributed to the formation of the views of his onetime secretary, J. F. Melon (1675-1738), and of Melon's critic and Law's defender, Charles Dutot, cashier of Law's Company of the Indies. Law believed monetary control to be the key to the solution both of economic problems in general and—in so far as it interested him—of the population problem.¹⁸ Dutot agreed in substance. Melon presented views which, though mercantilistic, are somewhat at variance with those of Law and which, according to E. Daire,¹⁹ reflect French upper-class opinion following the failure of Law's system.

Law believed, in general, not only that the power of the state depends in large measure upon the size of its population, but also that the size of the population and its activity depend upon the quantity of money in a kingdom. In his first *mémoire* on banks, prepared in 1716 for the Duke of Orleans, Law states: "It appears evident that commerce and the number of people, which form the wealth and power of a state, depend upon the quantity of monies and the manner in which they are employed."²⁰ He rea-

¹⁸ E. J. Hamilton, in one of his able studies of Law's system as applied in France, defines it as "the first experiment with a managed currency," an experiment designed to combat the crisis which followed the War of the Spanish Succession. See *Quarterly Journal of Economics*, LI (1936), 43, 69; also M. J. Wasserman and F. H. Beach, *American Economic Review*, XXIV (1934), 646-57; also P. Harsin, *John Law: œuvres complètes* (Paris, 1934), Introduction.

¹⁹ *Économistes financiers* . . . (2d ed.), p. 661.

²⁰ *Ibid.*, p. 521, 'also 517. The monetary solution is presented also in his other *mémoires* and in his *Considérations sur le numéraire et le commerce* (1705), all of which are contained in Daire's work cited in the preceding note. Law drew inspiration from Locke, Petty, Mun, Davenant, Barbon, and North. For accounts of French money

soned, generally, in this fashion: The volume of employment, and the efficiency with which resources are used, depend upon the volume of money in circulation. When this amount is inadequate, one of two undesirable consequences results: either (1), not all workers will be able to find employment; or (2), if all workers succeed in finding employment, it will nevertheless happen that neither they, nor the nonhuman resources, will be employed as advantageously as possible, and, consequently, the balance of trade will be less favorable than it might be. Moreover, when, because of a deficiency of money in circulation, the interest rate is too high, commerce is checked, and unemployment prevails; all who are without employment and provisions must emigrate or die of hunger. If, on the contrary, the supply of money in circulation is adequate, commerce and industry will develop sufficiently to absorb all rural and urban unemployed, to permit the most advantageous use of resources, and to make possible the most favorable balance of trade. If the amount of money is yet further increased, immigrants will be attracted from abroad. In support of this reasoning, and of his general proposition that (other things equal) the one of two countries with the greater supply of money would derive the greater advantage from the use of its labor and nonhuman resources, Law pointed to the advantages which England enjoyed relative to Scotland, and Holland relative to England.²¹ Law's doctrine with respect to population thus boils down to this: Both the growth and size of a country's population and its realizable population capacity depend upon its prosperity. Prosperity, in turn, depends upon the amount of money in circulation, and can be maximized only if the quantity of money in circulation is "sufficient."

Of most of the determinants of population growth, other than money, and of the consequences of population growth, Law said nothing. Only on the desirability of numbers was he explicit. Of wage determinants he said nothing, except to imply, perhaps,

and credit theory prior to Law see G. Martin, *R. H. S.*, II (1909), 1-40; A. Deschamps, *R. H. S.*, VIII (1920), 7-37.

²¹ That increases in the money supply increase the mobility of the factors of production seems to have been Law's belief. That the money must be proportionate to the population of a country he states explicitly (Daire, *op. cit.*, p. 517). For the opinions described above, see *ibid.*, pp. 449-52, 464, 503, 507, 512, 514-18.

that wages and employment would be greater when the supply of money was greater. Whether or not the amount of money in circulation might become too great, Law did not specifically indicate in the works here reviewed.²²

Dutot's work is primarily a criticism of Melon's monetary views and a defense of Law's doctrines. Essentially a realist like Forbonnais later, Dutot looked upon agriculture and industry as the sources of all wealth, and upon commercial expansion as the key to economic prosperity in France. While he distinguished between real wealth (e.g., merchandise, buildings, etc.) and wealth "of opinion" (i.e., specie, bills, etc., which serve "to measure real wealth"), he concluded that the amount of wealth "of opinion" in use governed the volume of employment and the degree of efficiency with which real wealth was used to create further real wealth.²³ He added that when there was not enough specie in a state to circulate all products and make prosperity possible, the lack would have to be made up by credit (i.e., bills or "monnaie de representation").²⁴ In his reply to Paris-Duverney,²⁵

²² Law attributed the greater prosperity of Protestant countries to their observing fewer feast days and holidays than Catholic countries. Indolence and lack of probity, he said, were traceable to poverty; poverty was not traceable primarily to indolence and lack of probity (*ibid.*, pp. 511, 521). Law approved the seizure and transportation of prisoners, unemployed, and others to America (D. M. Quynn, *American Historical Review*, XLVI, 1941, 832-36).

²³ *Réflexions politiques sur les finances et le commerce* (The Hague, 1738), I, 227-28, 231-32; II, 293-94, 330 ff., 372-73, 425-26. Page references are to this edition unless otherwise indicated. Commerce is valuable in that it rids a state of its superfluous supplies and secures to it what it lacks. A country, however, must not purchase abroad more than it sells, for the resulting unfavorable balance will cause an export of specie, and this loss of specie will throw some workers out of employment. Such an unfavorable balance can be corrected, however, through curtailment of the consumption of superfluities and luxuries imported from abroad (*ibid.*, II, 154-55, 299-303). In respect to the domestic production of luxury he states that labor is used advantageously whenever it is employed in ways that are not contrary to the customs and laws of the state (*ibid.*, II, 373). He adds, too, that those engaged in commerce perform valuable work, and that navigation, the soul of commerce, creates wealth and sustains many people (*ibid.*, II, 154-55, 330 ff., 372-73). Dutot noted the importance of rural wealth and like Boisguillebert, advocated taxation according to ability to pay. For an account of Dutot's work, of his reply to Melon, and of his controversy with Paris-Duverney, see Paul Harsin's introduction to his complete and definitive edition of Dutot's *Réflexions* (Paris, 1935).

²⁴ *Réflexions* (1738 ed.), I, 231-32; II, 425-26. Credit augments "consumption, commerce, industry, the value of land, & even the number of inhabitants" (*ibid.*, I, 234, also II, 354).

²⁵ See Harsin ed., II, for reply. The citation is from p. 16. Cf. Dutot's argument in respect to the interest rate with that similar theory of Leroy-Beaulieu (Spengler, *J. P. E.*, XLIV, 1936, 763).

Dutot indicates that an abundance of money stimulates population growth by depressing the interest rate.

There are only three means to augment the strength and power of a nation. Multiply its inhabitants, extend its commerce and ameliorate its soil. But the country will be peopled sufficiently if commerce and agriculture flourish there, and nothing is able to contribute more to both than to find money at low interest.

If men are able to live upon the interest of their money without doing anything, laziness will make them take this course for the most part. The inhabitants of a country where interest is high will not withdraw it from there in order to employ it in commerce whose profit does not exceed by half the interest upon their money. Therefore they will neglect several branches of commerce by which their neighbors profit, something that does not happen in a country where interest on money is low.

Low interest encourages those who have land to employ their savings and their ready money in the amelioration of this same land, which augments the real revenue of nature and occupies a much greater number of inhabitants. . . .

In brief, the volume of money governs the volume of employment and of economic activity in a nation and thus determines in a marked degree the populousness and power of a state.²⁶

²⁶ Veblen and K. F. Fieck (*American Economic Review*, XXIV, 1934, 631) have pointed out that the quantity theory involves the same type of reasoning as the wages fund doctrine. A passage from Dutot, quite similar to several passages in Law's works, illustrates Veblen's thesis. With the qualification that his proposition can be generalized to all countries by substituting "credit and specie" for "specie" when necessary, Dutot formulates the following proposition (*op. cit.*, I, 229-31):

"La force & la puissance d'un État depend du nombre de ses habitants, & le nombre de ses habitants est toujours proportionné à la quantité des Espèces qui est dans cet État. Car cent francs ne peuvent employer qu'un certain nombre d'hommes: s'il en reste à employer, & qu'il n'y ait point d'Espèces pour les payer, ces hommes ou meurent de faim, ou vont offrir leur travail à l'Étranger; ce qui affoiblit l'État, & fortifie l'Étranger à nos depens.

"A contraire, si nous augmentons la quantité de nos Espèces, & qu'au lieu de cent francs elle soit deux cens, l'État pourra employer de double d'hommes; s'il en manque pour gagner l'Espèce qui y est, cette abondance attire nécessairement les Négocians & les Ouvriers étrangers; ils viendront s'établir où l'abondance les appelle; ce qui fortifiera l'État, accroîtra les revenus du Roy, & ceux des particuliers propriétaires de Terres, de Maisons, &c. & augmentera considérablement notre commerce. Ce sont les Paysans & les hommes d'industrie qui font subsister l'État; ainsi, plus il y en a, plus il est puissant."

Dutot presumably postulated a rigid price structure despite the experience of France under Law's system.

III

Melon, though a metallist, quantity theorist, and exponent of other neomercantilist views, anticipated certain opinions of the physiocrats and the philosophes. For while he asserted that the economic strength of the state is determined in part by demographic and industrial progress, he believed this strength to depend also upon the health of agriculture, the adequacy of the grain supply, and the degree of comfort or happiness enjoyed by the population. Moreover, he was aware of the importance of the doctrine of cumulative progress, and an exponent of conditional economic liberalism.²⁷

In his chapter on political arithmetic, Melon indicated that population growth is dependent upon the growth of subsistence, and that the population which a kingdom can support increases in the same proportion as the grain supply expands (e.g., through clearing land).²⁸ His treatment of the checks to rural population growth is largely consistent with the preceding proposition, for he lists as checks to rural growth: poverty, malnutrition, insufficiency of subsistence, and pestilence (which is often traceable to poverty, misery, and malnutrition). He further lists as checks to population growth: civil war, misery and destruction caused by war, conquest, pestilence, earthquakes, and faulty distribution,²⁹ and (in countries with a too dense population) misery and abandonment of children.³⁰

Melon suggested that there was always an upper limit to the number of people which a state could support, but he did not consider this upper limit to be fixed, nor did he believe that population would always approximate this limit. Should the

²⁷ *Essai politique sur le commerce* (1734). Melon's views were influenced by the Abbé de Saint-Pierre (see Chapter VI) and by William Petty, with whose works he became acquainted in England in 1691. From the former he got his conception of progress, and from both men he acquired a respect for an empirical, utilitarian approach to social studies, and the belief that "everything is reducible to calculation" (*Essai*, chap. xxiv). (Saint-Pierre had prepared a *mémoire* on *L'Utilité des dénombrements*.) Concerning Dutot's criticism of Melon's monetary views see P. Harsin's Introduction to the 1935 ed. of Dutot's *Réflexions*, I, xvi-xxvii.

²⁸ *Essai*, in Daire, *op. cit.*, pp. 758-59.

²⁹ *Ibid.*, pp. 753-54, 759, 762, 772. Faulty distribution of aliments, ascribable to inadequate "police," could cause misery even when the total food supply was sufficient (*ibid.*, p. 772).

³⁰ *Ibid.*, p. 772. He refers to Duhalde's work on China.

population grow to the upper limit, it would be checked by misery, as in China.³¹ Wherefore, presumably, when all the land of a state has been brought under cultivation, and the number of soldiers and of workers in manufacturing has become adequate, and domestic production can no longer be expanded, it becomes incumbent upon the excess population to form colonies, or to move to colonies.³² That he believed the upper limit to the population capacity of a region to be variable and to tend upward in time is apparent in his suggestion that there are no limits to technological progress.³³ That he did not believe that population would inevitably grow to the supportable maximum is evident in his comments on the Northmen;³⁴ in his suggestion that population growth could be more effectively promoted by curtailment of celibacy, facilitation of marriage, and provision by the state of succor for large families and of education for orphans and foundlings than by conquest;³⁵ and in his advocacy of public health measures and preventive medicine as a means of checking mortality.³⁶ Moreover, he virtually conceived of a rising standard of

³¹ *Ibid.*, p. 672. Elsewhere (*ibid.*, pp. 719-21) he justified territorial conquest in case of overpopulation.

³² *Ibid.*, p. 676. Although he admitted colonies to be necessary to overpopulated nations, he considered colonies to be enfeebling when their peopling depopulated the mother country. (He referred to Spain.) Mother countries, he added, must retain the exclusive right to commerce with their colonies (*ibid.*, pp. 676-78, 681, 719-24, 733-36, 821).

³³ "This progress of industry has no limits; it is to be presumed that it will always augment, and that there will always be presented new wants upon which a new industry will be able to exercise itself" (*ibid.*, p. 691). This conception of progress probably was obtained from the Abbé de Saint-Pierre, to whom Melon often refers.

³⁴ He was well impressed with the Northern peoples (Scandinavians, apparently), because their laws had favored population growth and had given rise to an excess which had gone abroad and conquered foreign lands (*ibid.*, pp. 675-76).

³⁵ See *ibid.*, pp. 674-75. Melon, who cites the Abbé de Saint-Pierre on celibacy, opposed permitting anyone to enter the monastic state before the age of twenty-five. Melon's defense of the education of orphans was motivated, apparently, by the desire that they learn to work, for he shared the mercantilist view that all should work, and that mendicancy was a cause of robbery and theft. He advocated painful labor for criminals, less burdensome work for the poor. He observed, too, that if men and women were permitted to work in gangs, as in canal building, the work would prove less onerous (*ibid.*, pp. 675, 692-93).

³⁶ He proposed that European countries establish international sanitary measures for the control of human and animal epidemics and of destructive insects. He advocated, too, that each nation establish an academy to examine empirical remedies used by the so-called "bonnes femmes," select the good and abolish the use of the bad; require the *curés* to assist peasants in medical matters; publicize information on drugs and chemical discoveries (*ibid.*, p. 762). At the same time he condemned the Chinese (whom many

living which presumably could or would check population growth before numbers had reached the supportable maximum.³⁷

Despite his approval of certain population-stimulating measures and of colonial and domestic slavery,³⁸ Melon did not advocate the attainment of maximum populousness, saying that happiness and the achievement of a supra-subsistence level of existence were also important. "The arithmetical expression of the glory of the legislator is the number of persons to whom he has brought happiness, multiplied by the number of obstacles which he has surmounted."³⁹

Melon defended both liberty in consumption⁴⁰ and the view, as yet uncommon and often under attack,⁴¹ that luxury is economically and morally necessary and useful in a well-ordered society, serving therein as a growing source of employment, as a stimulus to ambition and solvent of idleness, and as a "new motive to work." Luxury therefore served to make support available for otherwise excess numbers, even as did colonial expansion; wherefore it was favorable to population growth.⁴²

other writers praised as progressive) because they respected cadavers and refused to study anatomy empirically and master that science (*ibid.*, pp. 772, 774). Adoption of his proposals, said Melon, would multiply and conserve men (*ibid.*, pp. 762-63). He proposed also that condemned persons be permitted to volunteer to serve as the subjects of experiments by medical scholars, and receive in exchange freedom, should the experiments not kill them (*ibid.*, p. 693).

³⁷ *Ibid.*, pp. 696, 762-63.

³⁸ Melon defended slavery in the colonies on the ground that it was necessary to colonial development. He advocated the enslavement of domestics on humanitarian grounds. "Equality among men is a chimera." The enslavement of white domestics in France would improve their lot, Melon contended. Domestics, he said, disliked their work, for they were not assured of security in old age; they were virtually forbidden to marry and were thus deprived of maternal love. Even if they bore bastards, the children suffered. Under a slave regime the domestics would be permitted to marry, have children, be assured security in old age; at least one of the children would be freed (*ibid.*, pp. 680-82). Compare with Linguet, below (Chapter VIII), and writers there cited.

³⁹ *Ibid.*, pp. 762-63.

⁴⁰ He also defended general economic liberty and freedom of trade in so far as they did not run counter to the common good. He favored freedom in internal commerce and in the exportation of grain, saying that such freedom would stimulate production; but he opposed the free admission of foreign products (*ibid.*, pp. 708, 712, 733-36, 821).

⁴¹ Whereas Fénelon harkened back to the values and utopias of the Greek and Roman writers, Melon, impregnated with the rational approach of Descartes and Fontenelle, and influenced by the moral philosophy of the French freethinkers and skeptics (e.g., Bayle, Saint-Evremond [see Chapter IV]) sought to establish precise principles, founded upon reason and observation and suited to further social progress in a dynamic world. See A. Morize, *L'apologie du luxe au XVIII^e siècle* (Paris, 1909), pp. 116-18.

⁴² *Ibid.*, pp. 118-29; *Essai*, chap. ix, p. 696. Defining luxury as "extraordinary sumptuousity," Melon stated that as man's wants grew in a dynamic world, that which

In sum, Melon rejected the view that population growth is an unconditional objective, drew attention to the determinants of population growth, and stressed certain advantages of economic liberty; in so far as he implicitly treated wages, he suggested not that wages tend to remain at the subsistence level, but (in respect to certain classes of workers at least) that both wages and the standard of living tend to rise and to remain above the subsistence level.⁴³

IV

Despite the theoretical and factual spade work of Vauban, Boisguillebert, and Fénelon, and despite the cues to effective methods of social criticism provided by Montesquieu and Voltaire, the depressed state of French agriculture inspired no extensive agrarian attack upon Colbertism and industrialism until after 1740. In fact, not until the late 1740's and the early 1750's did the *Journal économique*, Herbert, Forbonnais, Goudar, Danguel, and others begin to stress the importance of agriculture, show (among other things) its relation to population growth and density, and draw attention to the need of checking rural depopulation. By the late 1750's, however, many of the views that were soon to comprise physiocracy had been expressed or foreshadowed,⁴⁴ and the monetary mercantilism of Law and his disciples had been effectively criticized. The bulk of the considerable literature on agriculture remained speculative in nature until about 1780;

had been a luxury became a necessity (*ibid.*, p. 696). Melon apparently drew much inspiration from Mandeville. See F. B. Kaye, *The Fable of the Bees . . . By Bernard Mandeville* (Oxford, 1924), I, cxxxvi ff.; Morize, *op. cit.*, p. 113. Melon's views in turn influenced Voltaire (*ibid.*, pp. 113 ff.).

⁴³ For later mercantilistic opinion, see Chapter VII.

⁴⁴ See G. Weulersse, *R. H. S.*, XIX (1931), 244-72, for the pre-physiocratic movement in 1748-55. Although Claude Dupin is sometimes included among the forerunners of the physiocrats because he recognized the importance of agriculture and favored exporting the national grain surplus, his views resembled those of Colbert. He looked upon numbers as the principal source of a state's power and wealth, and upon subjects as belonging to the state. Therefore he approved Colbert's and other measures to stimulate marriage and natural increase, proposed curbs upon monasticism and celibacy, and advocated suppression of idleness and mendicancy and reduction in the number of feast days. He recommended restriction of the inflow of foreign merchandise and of the outflow of raw materials, exportation of the grain surplusage, and policing of the internal and external grain trade in a manner suited to prevent shortages and famine. See Dupin, *Œconomiques*, 1745 (M. Aucuy ed., Paris, 1913), I, 53 ff., 145 ff., 177 ff., 209 ff., and Aucuy's introduction.

thereafter practical works predominated.⁴⁵ A number of the theoretical writers on agriculture touched upon the problem of wage determination in the course of their discussions of governmental regulation of the grain trade and of the effect of fluctuations in the price of grain upon the condition of the working classes.⁴⁶

Of the pre-physiocratic French writers who approached the population problem in terms of agricultural values and reforms, Ange Goudar (1720-1791) was the most important. He looked upon population growth as an index of the soundness of a nation's laws, and shared the mercantilistic view that the state must be made strong. While he believed with the mercantilists that the strength of a state depended upon the size of its population relative to that of other states, and upon the degree of concentration of the population, he reasoned that a state's power rests ultimately upon agriculture, and not upon industry and bullion.⁴⁷ For agriculture was independent of foreign influence and of shifts in tastes and demands, inasmuch as its products were always needed and always consumed at home.⁴⁸ Moreover, population, the immediate source of national power, was dependent primarily upon agriculture for its support,⁴⁹ even as armies were dependent upon it for food and the power to win victories.⁵⁰

Goudar estimated that the actual population of France—in his opinion, about 17 millions—fell short by at least 8-10 millions of the number France was capable of supporting.⁵¹ Furthermore,

⁴⁵ Bourgin, *R. H. S.*, IV, 156-59; also Renard and Weulersse, *op. cit.*, pp. 210-35.

⁴⁶ For an account of the actual movement of grain prices in eighteenth-century France, see C. E. Labrousse, *R. H. S.*, XIX (1931), 132-211.

⁴⁷ *Les intérêts de la France mal entendus* (Amsterdam, 1756). This work had a "good press" at the time of its appearance, J. Delvaille shows (*R. H. S.*, V, 1912, 6-7). As Weulersse (II, 255-56, 263) states, Goudar wrote at times as a bullionist, even though his main objective was always the improvement of agriculture.

⁴⁸ *Les intérêts*, I, 7-8.

⁴⁹ "The true Power of a State is that which has Agriculture as its base. . . . The strength of a state is not in the great number of its men; it is in the greatest number, compared to that of other nations. . . . It is upon the general degree of subsistence that the number of men always depends" (*ibid.*, I, 7, 291, 294). A state with 50 million arpents and 8 million people is much stronger than a state with 150 million arpents and only 20 million people (*ibid.*, I, 293). Cf. last statement with Moheau and the Abbé Saint-Pierre. See also Weulersse, I, 244-46, for other writers who stressed the importance of agriculture.

⁵⁰ *Les intérêts*, I, 9-10.

⁵¹ *Ibid.*, I, 7, 289-90. Relative to her grandeur, he believed, France was the least peopled of European countries (*ibid.*, pp. 291-92). Herbert, the physiocrats (Mirabeau,

the population was maldistributed. Too many lived in cities, especially in Paris which had virtually become the kingdom as a result of political centralization; in consequence, agriculture suffered a shortage of hands. Besides, too much land was owned by the wealthy and by religious orders, neither of whom made efficient use of it. In short, agriculture was not making the progress of which it was capable, given appropriate conditions, and the population was not growing as rapidly as it might.⁵²

The many checks to population growth enumerated by Goudar—checks which prevented the French population from attaining a possible maximum—fall roughly into two classes, the immediate and the ultimate. Under the former head are found nonmarriage, family limitation, emigration, and excessive mortality; under the latter, factors associated with the prevalent societal culture, the prevailing modes of living, and the depressed condition of the French economy.

Societal culture was inimical to population growth in France. The French spirit of gallantry, typified in the behavior of lovers, generated disesteem for the role of husband, and therefore depreciated and checked marriage.⁵³ Societal life, which brought the sexes in constant contact, inspired men and women to be agreeable and desirous of pleasing one another, and made the conservation of beauty the primary objective. Some women, fearful of marring their beauty, through giving birth and breast to children, either lived celibately, “even within the bosom of marriage,” or refused to nurse their children.⁵⁴

Quesnay, Dupont, and Saint-Péravy), and a number of nonphysiocrats claimed, as did Goudar, that the population of France fell far short of the number which the country could support with ease. Dupré de Saint-Maur in 1746 estimated the French population at only 12-13 millions (*Essai sur les monnaies*, 1746, pp. 24-25). Duhamel du Monceau estimated the French population at 16-21 millions and the population capacity of France at 28 millions (*Ecole d'agriculture*, 1759, p. 18). See also Weulersse, I, 319; II, 287-89, 622-24.

⁵² *Les intérêts*, I, 36-51, 179-81.

⁵³ *Ibid.*, I, 261-63.

⁵⁴ *Ibid.*, I, 266-68. Mercenary wet nursing, Goudar indicated, checked population growth in several ways. First, infant mortality was more than 50 per cent higher among nursing children turned over to mercenary wet nurses than among those nursed by their own mothers. Second, women who acted as mercenary wet nurses did not tend to become mothers themselves (*ibid.*, I, 268-70).

There is frequent reference in and before the eighteenth century to whether or not mercenary wet nurses might be employed with safety, and to whether or not the milk of animals might be substituted for mother's milk. In and before the sixteenth and

Luxury checked population growth in various ways. The desire for goods and comforts conduced to celibacy. Many men, fearing the burden of a wife, home, and children, or their inability to educate their children, and unwilling to jeopardize their consumption of superfluities, refused to marry.⁵⁵ Many men deferred marriage until they had accumulated wealth.⁵⁶ Younger children tended to remain celibate when parents devoted the bulk of their property to the luxury-enjoying eldest son.⁵⁷ The luxury-loving beneficiaries of economic inequality wasted land by using it for parks and hunting preserves rather than in the production of subsistence;⁵⁸ they depressed agriculture by hiring potential agricultural workers as lackeys and domestics, and prevented female domestics from procreating by requiring them to remain unmarried.⁵⁹ Finally, the spread of luxury tended to increase indolence.⁶⁰

Goudar listed a number of other checks to marriage. France's one hundred thousand public prostitutes kept a like number of men from marrying.⁶¹ The number of celibates was being swelled also by the spread of the "spirit of philosophy" which rendered men contemplative and inclined them toward celibacy,⁶²

seventeenth centuries there is repeated the ancient folk-belief, present already in Roman writings, that the character of a child (or for that matter, of a young animal) is influenced by the character of the person, or animal, on whose milk it is fed. For this reason some writers objected to the use of milk, other than the mother's, for a child. Some writers apparently objected to the use of animal's milk because of unhygienic conditions surrounding its distribution in towns and cities. As early as the seventeenth century, however, some recommended the use of goat's or cow's milk when mother's milk, or that of a healthy wet nurse, was not available. For the early history of the milk industry, and for an account of the attitude toward the use of animal's milk for children see E. P. Prentice, *Hunger and History* (New York, 1939), esp. pp. 168-71. On mercenary wet-nursing see also the present writer's *France Faces Depopulation*.

⁵⁵ Goudar, *op. cit.*, I, 271-76.

⁵⁶ *Ibid.*, I, 277.

⁵⁷ *Ibid.*, I, 277-78, 325-27. Goudar, therefore, opposed primogeniture.

⁵⁸ *Ibid.*, I, 42-46.

⁵⁹ *Ibid.*, I, 95-96, 278-79. Goudar estimated the number of domestics at two hundred thousand (*ibid.*, I, 281).

⁶⁰ *Ibid.*, I, 96.

⁶¹ *Ibid.*, I, 282-83. Prostitutes, in part through their spreading (even into austere homes, Goudar observed) of venereal disease (especially syphilis), exhausted and enervated many persons, even among the married, thus reducing natural fecundity and augmenting mortality. Goudar considered it possibly unfortunate that a palliative for syphilis had been found, inasmuch as many persons, no longer fearing the disease, would tend to debauch (*ibid.*, I, 283-90). See also *ibid.*, I, 372-76, where he condemns the theater as a center of prostitution and a source of libertinage.

⁶² *Ibid.*, I, 281-82.

and by the institution of primogeniture which tended to prevent the younger sons from marrying.⁶³ The French law, requiring male and female children to be thirty and twenty-five, respectively, before they could marry without parental consent, caused many either to go abroad to marry and live, or to defer marriage and procreation.⁶⁴ Military and ecclesiastical celibacy,⁶⁵ and the use of annuities (*rentes viagères*)⁶⁶ entailed a great reduction in the number of married.

Subscribing to the general view that population growth is largely dependent upon the supply of subsistence, and therefore upon the level of agricultural prosperity,⁶⁷ Goudar found the principal ultimate checks to population growth in conditions unfavorable to agriculture. He attributed the undersupply of the rural population in part to the fact that indigence and discouragement—conditions traceable in large part to the weight of the small farmer's tax burden⁶⁸ and to pronounced inequalities in the distribution of landownership⁶⁹—led many ruralists not to marry, and destroyed a large proportion of the children of those

⁶³ *Ibid.*, I, 325-27.

⁶⁴ *Ibid.*, I, 316-18. Goudar condemned parental control of marriage on several grounds, in especial because it set familial above state ends. Marriages arranged by parents were usually founded, not upon reciprocal love, but upon the desire for economic and social advantage, and therefore were less fertile, on the average, than marriages freely contracted by the marrying parties. Furthermore, in so far as the rich tended to marry the rich in place of the poor, the relative number of marriages tended to be much lower. Wherefore, since "the first object of legislation must be population," and since children belonged to the commonwealth and not to the parents, the right of parents to withhold consent to marriage needed to be withdrawn (*ibid.*, I, 318-25).

⁶⁵ Goudar estimated the nonpeopling religious celibates at 500,000; the military celibates at over 150,000. He observed, too, that war killed many French, inasmuch as French soldiers generally fought abroad in uncongenial climates; and that the army contained many more commission-possessing persons than was necessary (*ibid.*, I, 342-53).

⁶⁶ Goudar estimated at over 50,000 the number of *rentiers*, the bulk of whom apparently did not marry for fear of reducing personal real income (*ibid.*, I, 341-42). See Chapter III, n. 61, for a description of French *rentes*.

⁶⁷ *Ibid.*, III, 275. Elsewhere (I, 294) he laid down three principles: "(1) That it is upon the general degree of subsistence that the number of men always depends. (2) That the population of a state will never be considerable when that of husbandmen is not flourishing. (3) That it is upon the comfort of the latter that the entire edifice of the general population depends."

⁶⁸ Taxes destroyed the incentive of small proprietors to improve their holdings (*ibid.*, I, 56-59).

⁶⁹ *Ibid.*, I, 42-51, 326. The religious orders, he said, did not use their great landholdings for the benefit of the State, for, lacking posterity, they were content to live on the revenue of the land; they had no incentive, as did the father of a family, to farm all the land, and to improve it for the benefit of posterity (*ibid.*, I, 46-51).

who did marry.⁷⁰ Factors favorable to industrial and urban development not only depressed the rate of rural population growth, but actually diminished the total population; for in the cities deaths exceeded births, and numbers were kept intact only by the influx of rural immigrants.⁷¹ The use of machine methods in the production of other than luxury products likewise tended to depress the rate of population growth.⁷² Internal political and economic conditions which caused many to emigrate,⁷³ and efforts to establish colonies abroad⁷⁴ had a similar effect.⁷⁵

Asserting that population growth must be the primary objective of legislation,⁷⁶ that each citizen was duty-bound to share the burden of augmenting the population,⁷⁷ and that population growth provided its own support by increasing the wealth of the state,⁷⁸ Goudar outlined a series of measures designed to make the "national spirit" favorable to marriage, and to eliminate obstacles to population growth. He recognized that the members of each class of society must be able to satisfy their physical

⁷⁰ *Ibid.*, I, 295-98. He attributed high infant mortality to the fact that mothers were too poorly fed to suckle their children well (*ibid.*, I, 297-98). Goudar, when in England, ascertained the average family size of one thousand English rural menages, and concluded that this average enabled the English to increase at a rate 50 per cent greater than a corresponding group of one thousand menages in a well-to-do French department. The English excess he attributed to their being more comfortable. In the less well-to-do sections of the French population the lack of subsistence produced actual depopulation (*ibid.*, I, 299-300).

⁷¹ In the cities, said Goudar, the desire for luxuries was more widespread and active than in rural areas, and tended to depress the frequency of marriage and the level of propagation below rural standards. Mortality, too, was greater in urban than in rural areas (*ibid.*, I, 334-41). See also his pamphlet *L'Anti-Babylone ou réponse à l'auteur de la Capitale des Gaules* (Paris, 1759), cited by Delvaile, *R. H. S.*, V, 11.

⁷² Goudar took it to be axiomatic that machines should be employed "for superfluities but never for necessities," since the social objective was the employment of the greatest possible number in the production of necessities. He denied Melon's view, then "generally received," that technological labor-saving devices tended to augment population, saying instead that Melon's view confounded "the product of industry with the means of subsistence," and that machines caused unemployment and idleness (*Les intérêts*, III, 275-77, 314).

⁷³ Goudar referred in particular to the effect of the revocation of the Edict of Nantes. Moreover, like Moheau, he believed that no other people expatriated themselves as easily as the French (*ibid.*, I, 301-14).

⁷⁴ In the American colonies, said Goudar, sixty out of one hundred French emigrants died because the climate and other conditions were unfavorable. Nor did the French emigrants multiply in foreign places where factories were established, most of them preferring to remain unmarried (*ibid.*, I, 329-32).

⁷⁵ Goudar was influenced by Montesquieu's (see Chapter VI, below) treatment of checks to population.

⁷⁶ *Ibid.*, I, 318.

⁷⁷ *Ibid.*, I, 271-72.

⁷⁸ *Ibid.*, I, 276.

needs and to obtain "necessary luxury" and the means for educating their children; and that the recompense of parents needed to be proportionate to the expense occasioned by children, inasmuch as Frenchmen were governed by self-interest.⁷⁹ But since the monarchy lacked adequate revenues to furnish each person the expenses entailed by propagation, it was incumbent upon the government to honor most those members of each class who propagated most. Therefore Goudar proposed

- (1) that the king, or his minister, write to each French father of eight or more living children, thanking him and declaring him a distinguished citizen;
- (2) that each subject with ten living children be made a chevalier in a new order established for that purpose;
- (3) that each subject with twelve children be ennobled, and, if the first of four living generations, admitted to the Order of Malta;
- (4) that in all public assemblies, the highest places for each rank of citizens be assigned to those with the most children;
- (5) that in public processions, first rank be assigned to the parents of large families;
- (6) that in competitions for gratuitous offices, members of large families be favored, other things equal;
- (7) that preference be given, in the sale of offices by the government, to members of large families;
- (8) that, in the case of annual offices, holders not be replaced by persons with fewer children;
- (9) that every citizen with four children be exempt from the capitation tax, and, if a property-holder, from one fifth of the *taille*;
- (10) that with minor exceptions, every craftsman or artist with six children be admitted gratuitously to mastership within his profession;
- (11) that every subject with eight children be permitted to carry a sword;
- (12) that in public deliberative assemblies, members be permitted to express their views, not in order of rank (gentlemen, bourgeoisie, merchants, artisans), but in order of the number of children of the members.⁸⁰

⁷⁹ Therefore Goudar, while favorably disposed to the ancient Roman laws (*ibid.*, I, 258, 353), characterized Colbert's system of pensions as utterly useless, saying that every Frenchman preferred celibacy to the task of raising and supporting twelve children (*ibid.*, I, 354-55) in exchange for a comparatively small and uncertain pension.

⁸⁰ *Ibid.*, I, 357-61.

To weaken the motivation to celibacy, Goudar advocated

- (1) that nonmarried subjects be declared ineligible for public offices and employment;
- (2) that secular celibates pay double tax rates;
- (3) that celibates be deprived of the right to inherit from foreigners, or from relatives in the third degree;
- (4) that celibates not be eligible for academy memberships or university professorships.⁸¹

In addition to the measures enumerated, all of which create either rewards for fecund individuals or disabilities for unmarried persons, Goudar proposed that cities and communities with high rates of natural increase be singled out for royal favor. He suggested that the privileges of cities and communities ought in general to be proportioned to their collective populative achievements. He proposed specifically that cities and communities with good demographic records be granted partial tax exemption and the right to erect monuments of their own choosing; and that the deputies of the king carry the latter's personal thanks to such cities and communities.⁸² Goudar apparently supposed that these measures would establish in cities a spirit congenial to propagation.

Many other more general reforms, designed to remove obstacles to marriage, were outlined by Goudar. He advocated the abolition of primogeniture, the greater subdivision of wealth, the elimination of *rentes* and of the *rentier* class, and the removal of all restrictions upon the right to marry.⁸³ He proposed a great reduction in the size of the regular army, the resulting gap in the armed forces to be made up by an enlargement of the militia, whose numbers, in times of peace, would pursue their customary lives, produce goods, and marry, with the result that the wealth and population of the state would be increased, and the burden of military pensions reduced.⁸⁴ He suggested, further, that if soldiers were allowed an extra ration for a wife, and for each three children, soldiers would marry, the army would replace itself, soldiering would become a family profession, and the work-

⁸¹ *Ibid.*, I, 362.

⁸² *Ibid.*, I, 361.

⁸³ *Ibid.*, I, 326, 408-09, 411-12.

⁸⁴ *Ibid.*, I, 205-12. He published a plan (*La paix de l'Europe*, Amsterdam, 1757) for the suspension of war and armies for twenty years.

ing class would not be depleted by war.⁸⁵ He advocated not only the restriction of the number of priests and members of religious orders, but also a tax on convents and monasteries, on the principle that those who diminished the population must pay for its reparation. The tax monies thus raised were to be used to dower poor males and females who lacked the means on which to marry.⁸⁶ He proposed the suppression of prostitution, incontinence, and debauchery, but declared that regulations directed to this end would not succeed unless the upper classes set a good example.⁸⁷ He suggested two restrictions upon current modes of consumption which tended to delay or prevent marriage: (1) limitation, by decree, and for each social class, of the amounts which could be spent upon formalities and superfluities in connection with the solemnizing and celebration of marriage; (2) a geometrically progressive tax on celibate domestics, the proceeds thereof to be used to relieve the burden of the *taille* upon poor ruralists.⁸⁸ Finally, he advocated the recall to France of the Jews, remarking that they were good citizens who married at an early age and multiplied rapidly.⁸⁹

Stringent control of emigration was advocated by Goudar on the ground that since each subject was a "portion of the political power," the diminution of such power through unwarranted emigration was a crime of "*lèse-majesté*."⁹⁰ Goudar proposed that no one be allowed to depart from France except with governmental permission; that passports ordinarily be limited to one year, emigrants not returning within that time to suffer loss of property and citizenship; that persons finding it necessary to be abroad three years, post a bond of 20,000 livres and suffer the loss of bond and property in event of their failure to return; that the marriage of any subject who married abroad be declared null and void, should he not return with family within a designated time; that the retinue of French ambassadors be limited; that

⁸⁵ *Les intérêts*, I, 419-20.

⁸⁶ *Ibid.*, I, 412-17.

⁸⁷ *Ibid.*, I, 365-79.

⁸⁸ *Ibid.*, I, 382-84. Elsewhere (*ibid.*, I, 243-44) Goudar said that a tax on the employers of domestics would not diminish sufficiently the number of the latter, inasmuch as the tax would be taken out of their wages; therefore, he proposed fixing the number by law for each class of employers.

⁸⁹ *Ibid.*, I, 421-26. Montesquieu also had pleaded the case of the Jews.

⁹⁰ *Ibid.*, I, 389.

French subjects who embarked without passports be imprisoned for six years; and that French or foreign ship captains be subject to severe punishment, for taking on board French subjects without passports; that the number of subjects allowed to engage in colonial commerce, or to work in foreign factories and concessions, be limited; and that only those who could afford a certain number of slaves be permitted to settle in the American colonies.⁹¹

Goudar also favored the adoption of measures suited to decentralize the population, supply hands to agriculture, and stimulate its development. In one place he proposed a census of handicraftsmen, with a view to removing many of them and their dependents from the cities and redistributing them among the nonurban sections of France.⁹² Elsewhere he recommended dispersing among the provinces the schools and manufactures then located in Paris, and denying to persons born outside Paris the right to reside there unless they first obtained governmental permission.⁹³ He proposed, further, that all the idle poor and the beggars be forced into agriculture, especially the clearing of land.⁹⁴

In several respects Goudar's conclusions resembled those of the physiocrats. A tax on provisions, he said, would augment their price, diminish their consumption, and check the expansion of agriculture and the development of population.⁹⁵ While he evolved no wage theory, he apparently subscribed, in so far as most wage earners were concerned, to a subsistence or near-subsistence theory. He favored freedom in both the internal and the

⁹¹ *Ibid.*, I, 389-407.

⁹² *Ibid.*, I, 410-11.

⁹³ *Ibid.*, I, 181-86. Paris contained, Goudar estimated, about 100,000 born in other parts of France. Were these 100,000 dispersed throughout the kingdom, he reasoned, they could, through pursuit of agriculture, produce enough food to subsist an additional 100,000 persons who, in turn, could furnish subsistence to an equal number engaged in manufacture (*ibid.*, I, 179-80).

⁹⁴ Each community was to provide shelter for these enforced agriculturalists, and be responsible for escapes. Those who made use of their services were to clothe and feed the workers. At the end of six years each worker would be free to quit and sell (what amounted to) his equity to another cultivator (*ibid.*, I, 227-34). Goudar also proposed using space in religious communities for public workhouses for the poor and the idle, and establishing places of work for ex-soldiers upon the termination of wars (*ibid.*, III, 337-44). Elsewhere (I, 88-89) he stated that public charity caused workers to abandon hard agricultural work.

⁹⁵ *Ibid.*, I, 197. Elsewhere (III, 280) he said that taxes on manufactures prevented their development and tended to cause emigration.

external grain trade, believing that such freedom would stimulate the demand for the products of French agriculture, foster expansion of the merchant marine, and make other countries dependent on France.⁹⁶ Unlike the physiocrats, he believed small land units more favorable to agriculture and population growth than large units, and proposed heavy taxes upon units of more than 10 arpents.⁹⁷

Goudar subsequently published a stinging satire upon the government, life, and manners of the French.⁹⁸ In this work he said that "food . . . limits the numbers of the species," and that a permanent society can be founded only upon an agricultural base.⁹⁹ He described the wretchedness of the French peasants much as had La Bruyère and referred almost as scathingly to the population of cities as did Jefferson later.¹⁰⁰ Men "should not enjoy great superfluity," he wrote, "but they should always be abundantly supplied with necessities."¹⁰¹ In France, where luxury manufacturing had been developed at the expense of agriculture,¹⁰² and most men lacked necessities, population could not be the "soul of political power," Goudar implied, so long as many of the misery-ridden were no better than "dead carcasses."¹⁰³

Goudar touched indirectly upon a number of checks to population growth in France. Most important, he claimed, were love of luxury and Catholicism; the latter had inspired the death-dealing crusades and religious wars¹⁰⁴ and continually led many

⁹⁶ *Ibid.*, I, 18-23, 163-72; II, 252-57, 264. He observed (II, 265) that grain prices tended to be higher in places where manufacturing flourished.

⁹⁷ *Ibid.*, II, 128-31. An arpent varied in value with locality from .84 to 1.28 acres.

⁹⁸ *The Chinese Spy* (Dublin, 1766). This work, modeled after Montesquieu's *Lettres persanes*, was written by Goudar when he lived in England. He published several other critical works, one of which was burned at Naples (Delvaille, *R. H. S.*, V, 3-4).

⁹⁹ *The Chinese Spy*, I, 6-7, 45. "Propagation increases in proportion as land is cultivated with care. . . . When the harvest is abundant, marriages multiply; the scantier it is the fewer children are born" (*ibid.*, p. 7).

¹⁰⁰ *Ibid.*, pp. 8-13. Cf. Jefferson's views in my essay, "The Political Economy of Jefferson, Adams, and Madison," in *American Studies in Honor of William Kenneth Boyd* (Durham, 1940).

¹⁰¹ *The Chinese Spy*, I, 6.

¹⁰² *Ibid.*, I, 116-17, also 88-92; II, 69-70, 129-31. He condemned the ostentatiousness of funerals (I, 133-34).

¹⁰³ *Ibid.*, II, 56. France, if well cultivated, could support twenty-five million (II, 114).

¹⁰⁴ The crusades had destroyed two million Europeans, checked propagation by palsying economic life, and left Europe "almost without inhabitants" (I, 95-96).

to become celibates and "make vows of sloth."¹⁰⁵ War and dueling were likewise unfavorable.¹⁰⁶ The discovery of America had introduced checks in the form of syphilis, emigration, and rising prices.¹⁰⁷ The licentiousness of French urban women, traceable to their education, practice of confession, and mode of dress,¹⁰⁸ was not conducive to population growth.¹⁰⁹ In contrast, the customs, religion, and government of China were congenial to familial life and population growth.

v

The basic importance of agriculture in the life of the French nation was equally emphasized by C. J. Herbert,¹¹⁰ who held labor and land to be the primary resources of a nation, and agriculture its basic industry.¹¹¹ Upon agriculture depended a nation's power and wealth, its ability to colonize, the fruitfulness of its commerce, and the capacity of its territory to support population.¹¹² "The fruits of the soil are the most real wealth of nations." In contrast, manufactures and trades founded upon the creation of "wealth of convention" are subject to the vicissitudes of war and changing times and to the caprices of fashion, and therefore are not durable, as is agriculture.¹¹³ Commerce can "supplement sterility of the soil, & attract men and products in abundance"; yet, to remain continuously fruitful, it must be

¹⁰⁵ *Ibid.*, I, 7-8, 64. "The Genevois believe neither in the mass nor the Pope: hence they are very industrious and laborious, and of an extraordinary fecundity in population" (*ibid.*, I, 116). Goudar was vitriolic in his condemnation of Catholicism and monkery; he referred to the Pope as the "commander in chief" of the King of France (*ibid.*, I, 99).

¹⁰⁶ *Ibid.*, I, 37-39, 102; II, 100-01, 104-05.

¹⁰⁷ *Ibid.*, I, 121-25.

¹⁰⁸ The romances read by young girls fitted them for debauchery (*ibid.*, I, 160). "Ten confessions teach a girl more than the licentiousness of the world" (*ibid.*, II, 136). Referring to the transparency of "women's cloaths," he said: "Here a lover enjoys half the woman, before she comes into his possession. . . . Most of the marriages in Europe are succeeded by an extreme coldness; it is because they add little or nothing to the delight of the senses" (*ibid.*, II, 9).

¹⁰⁹ *Ibid.*, I, 29-30, 112-14; II, 71-72, 95-97, 121, 139.

¹¹⁰ *Essai sur la police générale des grains, sur leurs prix & sur les effets de l'agriculture* [1753] (Berlin, 1755). Herbert refers to the works of Locke, Hume, Newton, Melon, Vauban, Saint-Pierre, Boisguillebert, Forbonnais, Ustariz, and the Roman authorities on agriculture.

¹¹¹ *Ibid.*, pp. 308, 358-61.

¹¹² *Ibid.*, pp. 301, 351.

¹¹³ *Ibid.*, pp. 1-2, 310, 359-61. He admitted, however, that agriculture, though more stable, was less lucrative than industry and commerce (*ibid.*, pp. 308-10).

founded upon products of the soil.¹¹⁴ Agriculture exercises a beneficial moral effect upon the population, whereas industrial development and its concomitants may undermine the *mœurs*.¹¹⁵ Agriculture "is the nursery of Workers, Soldiers, Sailors. . . . Aliments, population, arts, commerce, navigation, armies, revenues, wealth, all progress behind agriculture. The more flourishing it is, the greater are the resources and vigor of the state."¹¹⁶

Having demonstrated the basic importance of agriculture to the political and economic strength of France,¹¹⁷ Herbert indicated that French agriculture was languishing, and that its revivification was essential to the aggrandizement of the nation and to the felicity of its inhabitants; but he developed no theory of economic imbalance and agricultural underdevelopment as did Quesnay later. France's population numbered only eighteen millions, perhaps less than in Vauban's day, despite the fact that her territory was capable of supporting between twenty-five and thirty-five millions.¹¹⁸ Moreover, many of the rural inhabitants were "badly dressed, badly nourished, livid, & decrepit before their time," and unlikely to produce "a more vigorous posterity";¹¹⁹ and many were abandoning agriculture and the countryside for better paid and less onerous urban occupations.¹²⁰ Much of the land was not being cultivated, and much that was under cultivation was being tilled badly.¹²¹ "Our countrysides in effect are not cultivated in proportion to their fertility, nor peopled in proportion to their extent."¹²² Accordingly, if rural depopulation were checked, agriculturalists were induced to cease quitting agriculture for socially less useful urban occupations,¹²³ and cul-

¹¹⁴ *Ibid.*, pp. 309, 325.

¹¹⁵ *Ibid.*, pp. 349-51, 357-61.

¹¹⁶ *Ibid.*, pp. 306, 307. Elsewhere (*ibid.*, pp. 315-16, 356) he stated that rustics made good soldiers, and should be kept "flourishing enough to furnish recruits for our legions at all times."

¹¹⁷ "The worth of a State is not measured by the extent of its Domaines; but by the quality of its productions, by the number of its Inhabitants, & by the utility of their works" (*ibid.*, p. 319).

¹¹⁸ *Ibid.*, pp. 119-20, 123, 127, 330-35. He refers to Vauban's estimate.

¹¹⁹ *Ibid.*, p. 330.

¹²⁰ *Ibid.*, pp. 336-39.

¹²¹ *Ibid.*, pp. 330, 336.

¹²² *Ibid.*, p. 330.

¹²³ Nonagricultural labor was often socially sterile, in Herbert's opinion. "The loss of a cultivator causes more damage than that of an infinity of men more remarkable, & the occupations of whom produce nothing useful to the society. A rustic inhabitant of the countryside who spends his life in furnishing the needs and comforts of humans, & who establishes successors in his painful employments, renders more

tivation were improved and extended, the population, revenues, and power of the state would increase.¹²⁴ To achieve these desired effects Herbert advocated the improvement of grain markets and prices through inauguration of the right to export grain,¹²⁵ modifications in the tax system,¹²⁶ and the establishment of a research bureau to discover how agriculture could be improved, and why some provinces were more favorable to agriculture, manufacturing, and population growth than others.¹²⁷

Agricultural pursuits, Herbert said, were far more favorable to population growth than nonagricultural and urban occupations, for in agricultural districts the important political and moral checks to population growth were far less operative.¹²⁸ In the

service to his Country than the superb Inhabitant of the cities, the luxury of whom often suffocates posterity. . . . An uncultivated arpent is . . . a destructive Vice in the State . . . there are neither men nor revenues. A cultivated arpent is therefore a more effective asset than a thousand things which most attract our attention. All these objects which add nothing to the happiness or to the power of peoples, have they the same advantage as the gifts of tillage? Often they bring nothing in to the State, and never do they contribute as surely to increase public revenues. . . . Agriculture . . . contributes more to the aggrandizement & to the power of States than the most exquisite talents" (*ibid.*, pp. 339, 341-42). The husbandman supports many rural persons besides himself (domestics, laborers; also useful animals), whereas the nonagricultural worker does not. Herbert added, further, that the worker in luxury produces less of use to the state than he would produce, were he a cultivator; at best he provides the state with "only a mobile & transient revenue" (*ibid.*, pp. 352-54).

¹²⁴ *Ibid.*, p. 318. "The more there are of people and products, the more abundant and assured are the finances ["the nerves of the State"]. The taxes then fall upon a larger number of heads, are portioned out and paid more easily" (*ibid.*, pp. 327-28).

¹²⁵ *Ibid.*, pp. 40-41, 76-78, 140-45, 168, 186-95, 277-80. In a study of viticulture, he reasoned that such culture should be freely permitted, saying, among other things, that population growth would be favored, inasmuch as this type of agriculture required much labor (cited in Weulersse, II, 284). He supported elsewhere (*Essai*, pp. 353-57) a kind of international agricultural warfare, saying that if a state like France could export provisions very cheaply, it could cause abandonment of agriculture in countries buying from France, and thus undermine their political and economic strength.

¹²⁶ *Ibid.*, pp. 399-400, 417-19, 432. He advocated roughly that citizens pay taxes in proportion to their income or wealth; and that the state not collect more money than necessary to sustain and protect itself and the rights and property of its citizens. Elsewhere he said that the state supported too many useless individuals, but added that he would not weaken the nobility, who as a class were important in the defense of the country (*ibid.*, pp. 311-15).

¹²⁷ *Ibid.*, pp. 367-68, 373, 380.

¹²⁸ Losses caused by war, famine, and epidemics were reparable; losses occasioned by "internal vices which undermine the state by imperceptible degrees" were hard to repair because the vices could not be brought under control. Herbert included among these vices such conditions as bad government, situations inimical to agriculture, and luxury (*ibid.*, pp. 305-06, 319-21, 323, 344-45). Worst of all were factors making for rural depopulation (*ibid.*, pp. 338-39). In Spain the population had declined because subjects had been expelled, religious institutions had absorbed private wealth,

absence of "physical, political, & moral obstacles" the number of men "would augment to infinity." Actually, however, countries peopled themselves "not according to the natural progression of propagation, but in proportion to their industry, their products, & their institutions."¹²⁹ Facility in obtaining subsistence, security, and simplicity of tastes were prerequisite to continued population growth.

Men . . . multiply as the products of the soil, & in proportion to the advantages & the resources that they obtain through their labors. Their first care is that of needs; when they find these satisfied no anxiety opposes itself to their augmentation. The cultivator (colon) is not apprehensive at seeing his family increase, when he foresees being able to sustain it, but men, discouraged or in misery, lay hold of too little subsistence to have care for that of others. One does not care to water plants when one has need of water for oneself.

It is not in the Cities, nor in the highest ranks, that a resource for posterity must be sought. The manner of living, the passions, concern, delicacy, are obstacles to population. Human nature unfolds all her fecundity only in flourishing country districts, & among those who, without any ambition, work only just to live. . . . An augmentation of family is an augmentation of goods for the Cultivator: his lands, better worked at less expense, furnish him more subsistence; and its abundance facilitates population.

This abundance depends less upon the fertility of the terrain than upon the causes which attach each Individual to his country, or which disgust him with it. Fecund countries depeople when the Inhabitant is not able to enjoy without disquietude the fruit of his toils. Sterile countries repeople themselves through the ease and the encouragement of subjects. . . . People augment in proportion to the facility that they find in living; & men multiply naturally as provisions, when their living is not thwarted by needs, or by fear. To protect agriculture is to aid nature in her operations.

From the superiority of tillage comes a superiority of population; from a greater number of Inhabitants comes a greater industry; from well directed industry progresses a more extended commerce: & these different developments form the unalterable sources of public revenues. . . .

the heavy cost of government had fallen upon the most useful citizens, and men had ceased to work hard (*ibid.*, p. 226).

¹²⁹ *Ibid.*, pp. 319-20.

Cultivation, population, [and] commerce extend power; & all these branches proceed from agriculture.¹³⁰

Herbert described luxury as unfavorable to population growth and agriculture in particular, and to the power of the state in general. When luxury industries are developed, and men are drawn into occupations that stimulate their wants, they come to prefer factitious and frivolous goods and to live beyond their means, and there is introduced "a disorder contrary to the augmentation of families," the *mœurs* decay, and the population declines in number and vigor and moral quality.¹³¹ Moreover, rural workers and land are diverted from food-producing, the supply of grain and subsistence diminishes, food prices rise, and numbers decline. "The gardens of Lucullus covered the plains of Ceres" in luxury-ridden Rome.¹³² Even were a country able to develop manufacturing, to obtain gold and provisions from abroad in exchange for manufactures, and to hire soldiers and munitions in time of war, such a country would still suffer, for in time of war its manufacturing and its export industry would languish.¹³³ The introduction of superfluity-producing industries was desirable, therefore, only after agriculture had been completely developed, and the army and navy had been fully recruited.¹³⁴

Herbert merely touched upon wage theory when replying to the charge that grain prices and wages would rise, with the removal of barriers to the export of grain. If the price of grain were very low, and in consequence proprietors could not afford to hire many workers, the best workers would move to the city, to the detriment of agriculture.¹³⁵ If freedom to export grain should animate agriculture and cause cultivation to be extended, grain prices would not tend to rise. Even if they did increase, the increase would be slight and would be virtually compensated by the fact that in bad times the price would not be so high as it

¹³⁰ *Ibid.*, pp. 323-25.

¹³¹ *Ibid.*, pp. 344-47, 348-50. "A nation is more peopled in proportion to the simplicity & the virtue which reign there" (*ibid.*, p. 348).

¹³² *Ibid.*, pp. 341-42, 346, 353-55, 357-58. In so far as luxury production reduced grain exports, it reduced the dependence of other countries on France (n. 125, above).

¹³³ *Ibid.*, pp. 357-59.

¹³⁴ *Ibid.*, pp. 354-55.

¹³⁵ *Ibid.*, p. 279.

otherwise would have been.¹³⁶ In support of the view that an increase in the price of grain would not push up wages, he said that experience showed that often in times of scarcity and high grain prices, wages were lower; for workers were afraid of unemployment, gave up superfluities, and worked harder.¹³⁷ His general position was that wages were conditioned principally by circumstances other than the price of grain. "The measure of wages is therefore in the population, in the work and habits of peoples, & in the taxes on consumption." Thus wages were higher in England and Holland than in France; but why this was the case Herbert did not really explain.¹³⁸ Unlike the physiocrats, Herbert looked upon supra-subsistence real wages as a possible cause of unemployment; for he said that if grain prices were low, many laborers would work only enough days to earn the money with which to satisfy their simple needs, and would acquire a taste for idleness.¹³⁹

VI

Many writers other than Goudar and Herbert treated of agriculture and its relation to population. Here attention will be devoted only to the opinions of the Marquis d'Argenson (1694-1757), Belial des Vertus, Pierre Poivre (1719-86), and several anonymous writers whose views reflect the nonphysiocratic agrarian outlook.¹⁴⁰

Argenson's opinions resembled those of the physiocrats in a number of respects. He opposed governmental restrictions on economic life and favored laissez faire, commercial liberty, and the elimination of monopolistic privileges.¹⁴¹ He was disturbed

¹³⁶ *Ibid.*, pp. 283-85. He argued in substance (*ibid.*, pp. 290-93) that if grain prices were more stable, the average risk faced by those supplying the army would be reduced, and the cost of rations to the army would be less.

¹³⁷ *Ibid.*, pp. 285-89. Storing grain would prevent a deficiency in bad times (*ibid.*, pp. 21, 29-31).

¹³⁸ *Ibid.*, pp. 289-90.

¹³⁹ *Ibid.*, pp. 278-79.

¹⁴⁰ For other opinions see Weulersse, I and II, and article cited above. Even after the physiocratic views had become current, some agrarians continued to argue that agriculture ought to be favored because it stimulated population growth, on which depended the power of the state. E.g., see *Mémoire sur l'agriculture*, by a "Peasant" (1763), pp. 5-6.

¹⁴¹ A. Alem, *Le Marquis d'Argenson et l'économie politique au début du XVIII^e siècle* (Paris, 1900), pp. 19, 76, 161, 176, 181; Weulersse, II, 24, 29, 40, 98, 103, 118, 478, 652. Argenson's two chief works are his *Considérations sur le gouvernement*

at rural depopulation, which he attributed to the neglect of agriculture and to the favoritism shown other professions.¹⁴² He denied that luxury industries were necessary to provide employment and pointed to the shortage of workers in agriculture.¹⁴³ While he considered other industries than agriculture to be productive, he reasoned that the entire economy would prosper so long as agriculture prospered.¹⁴⁴

Argenson differed from the physiocrats on a number of points. He looked upon inequality as the cause of misery, depopulation, moral depravity, and other evils.¹⁴⁵ Accordingly, while he recognized that variations in personal talent would occasion inequality in wealth, he urged that legislators strive to reduce inequality,¹⁴⁶ and recommended the removal of artificial institutional causes of inequality (e.g., right of the eldest, hereditary offices, etc.).¹⁴⁷ He saw in the rise of large-scale enterprise and finance capitalism the cause of the shrinking of opportunity for persons of little or no means.¹⁴⁸ He opposed large-scale agriculture, saying that cultivation would be most efficient if landownership were widespread and each cultivator were motivated by the fact that he would enjoy the profits of his labor.¹⁴⁹ He advocated sumptuary laws to check the growth of luxury, which in his opinion undermined the virtue and character of the people.¹⁵⁰ He emphasized far more than the physiocrats the fact that persons engaged in agriculture made good soldiers.¹⁵¹

Unlike the physiocrats, Argenson was a populationist. He expressed regret at the loss of emigrants¹⁵² and said that France could nourish five times as many inhabitants as she then con-

ancien et présent de la France (Amsterdam, 1784) and his *Journal et Mémoires*, ed. M. Rathery (Paris, 1859-68). See also H. Sée, *L'évolution*, pp. 86-102.

¹⁴² Alem, *op. cit.*, pp. 52-55.

¹⁴³ *Ibid.*, pp. 111-12.

¹⁴⁴ Weulersse, I, 20, 391, 393, 593; II, 399.

¹⁴⁵ Lichtenberger, *op. cit.*, pp. 96-97.

¹⁴⁶ *Ibid.*, pp. 100-01.

¹⁴⁷ Alem, *op. cit.*, pp. 74-75; Barzun, *The French Race*, pp. 186-87. Argenson praised Morelly's *Code de la nature*.

¹⁴⁸ Lichtenberger, *op. cit.*, pp. 97, 99.

¹⁴⁹ Alem, *op. cit.*, pp. 71-72; Lichtenberger, *op. cit.*, p. 101. Argenson proposed the imposition of heavier burdens upon land holdings in excess of 100 arpents (Alem, *op. cit.*, p. 75). He looked upon the nobility as a nefarious race whose privileges were the source of the misery of the peasants (Barzun, *op. cit.*, pp. 186-87).

¹⁵⁰ Alem, *op. cit.*, p. 112; Lichtenberger, *op. cit.*, pp. 100-01.

¹⁵¹ Weulersse, I, 247, 393.

¹⁵² Alem, *op. cit.*, p. 147.

tained.¹⁵³ The institution of marriage was contrary to "natural law" and unfavorable to propagation. Accordingly, he proposed free unions,¹⁵⁴ unions running for five years, then to be terminated in the event of failure to procreate, and taxes upon celibates and compensation for mothers.¹⁵⁵ He believed that the New World could be peopled in two centuries, were it opened to all peoples instead of to the few peoples that had obtained control of it.¹⁵⁶

Belial des Vertus subscribed only to the physiocratic view that agriculture was the principal source of wealth. A large population was valuable to the state, he reasoned, because it could provide more soldiers and a greater tax revenue than a small population. Agriculture was important because it sustained population and hardened men for military purposes. Small-scale agriculture was preferable to large-scale agriculture because the former could support a much larger population. He opposed education of the peasants on the ground that it softened them. He opposed the exportation of grain because: (1) such grain supported foreigners in place of natives; (2) grain exports would elevate the price of grain in France and cause the money wages of workers in manufactures to increase, thus elevating the price of French exports and handicapping French exporters in international competition.¹⁵⁷

Pierre Poivre, a traveler and a critic of French colonial practice,¹⁵⁸ reasoned that agriculture and population flourish when the laws and the *mœurs* are good. "Security, property, liberty" are the only "true foundations of agriculture, the sole principles of abundance." Where government is in accord with the prin-

¹⁵³ *Ibid.*, p. 150.

¹⁵⁴ Marriage was suited to the temperament of the English and Dutch, but not to that of the French (Schöne, *op. cit.*, p. 199).

¹⁵⁵ *Ibid.*, pp. 198-200; Lichtenberger, *op. cit.*, pp. 102-03. Lichtenberger refers to *Réflexions sur la propagation de l'espèce humaine*, in *Réveries du Maréchal de Saxe* (Dresden, 1757). Schöne, however, attributes *Réflexions* to Saxe. On Saxe, see Chapter III, below.

¹⁵⁶ Lichtenberger, *op. cit.*, pp. 102-03. In 1737 Argenson proposed establishing an association of all Christian princes to perpetuate peace in Europe, conquer the Turks, and subsequently colonize Asia and Africa with Europe's excess population (Silberner, *op. cit.*, pp. 175-79).

¹⁵⁷ *Essai sur l'administration des terres* (Paris, 1759), avertissement, pp. 1-6, 138-40, 144; Weulersse, II, 277, 409; A. Oncken (ed.), *Œuvres de Quesnay*, p. 358 n.

¹⁵⁸ Poivre was made a colonial intendant in 1766. Both his views and his efforts in behalf of agriculture caused the physiocrats to celebrate him as precursor (Weulersse, I, 158-59; II, 249-50).

ciples of reason, agriculture prospers, there is abundance, and the people are happy and multiply. Where, on the contrary, taxes are heavy, and there is inadequate security, liberty, and respect for property, men are not happy and do not multiply rapidly.¹⁵⁹ Presumably, while he looked upon population growth as an index of collective well-being, he favored such growth only in so far as it was consistent with the happiness of the individual.

An anonymous writer declared in 1760 that agriculture is the sole source of great population growth, whereas commerce and luxury production operate together to destroy the true wealth of the state (agriculture, industries producing primary necessities, and population) and bring about depopulation. Commerce and luxury industries attract workers from the countryside, thus causing rural depopulation. Commerce, moreover, fosters long-distance navigation and colonization, both of which draw population from the mother country. In support of his thesis the author argued that all the rich countries of Europe had been suffering depopulation for several centuries.¹⁶⁰ The reviewer admitted that France's population had declined from twenty-five to sixteen million since the reign of Henry II, and that Spain and England were suffering depopulation; but he attributed this depopulation to bad government, heavy taxes, and the diversion of agricultural workers into the army and other occupations. Luxury industries occupied very few ex-farm workers. Colonial development favored population growth by increasing employment and the supply of provisions.¹⁶¹

The *Journal de commerce* published Mirabeau's *L'ami des hommes* in 1759; argued against Patullo that population growth would be checked, were too much land put in pasture;¹⁶² apparently approved both the opinion that agricultural improvement

¹⁵⁹ *Voyages d'un philosophe* [1766-67] (1779 ed.), pp. 3-4, 9, 102, 144-50. Poivre, unlike the physiocrats, pointed to China as a model country. His work dealt chiefly with Asia, Africa, and America.

¹⁶⁰ *Traité sur divers sujets intéressants de politique & de morale* (1760), summarized in *Journal de commerce*, V (Sept., 1761), 48-50, 64.

¹⁶¹ *Ibid.*, pp. 58-61, 63-64. Elsewhere in this journal (I, Jan., 1760, 5, 39-45), it is said that commerce augments population by exciting in it ambition, passion, and the desire for luxuries; that sumptuary laws are prejudicial to luxury, an important source of wealth. In other numbers it was observed that foreign imports had checked French population growth and state power, which rested on numbers (I, Feb., 1759, 44-45); that commerce tended to increase population (III, 1759, 92, 95).

¹⁶² I (Feb., 1759), 94. Montesquieu is cited in support of this attack on grazing.

would stimulate population growth very considerably,¹⁶³ and the view that the concentration of landownership prevented the indigent from marrying, thus causing youth to seek sex satisfaction outside marriage, spread venereal disease, and multiply the number of foundlings.¹⁶⁴ A reviewer approved Bielfeld's opinion¹⁶⁵ that since the true power of a state consists in its population, the growth of numbers must be stimulated through the encouragement of marriage and immigration and the prevention of emigration. The reviewer added that population would grow if industry were expanded; that marriage could be stimulated by giving dowries to members of the cultivating classes; that pecuniary aids to marriage in Paris would fall into the hands of useless mendicants, or of persons not in need.¹⁶⁶ Another writer admitted that a state could become too peopled for its agriculture and industry, adding that emigration to foreign lands would then develop. Though not opposed to emigration in general under these circumstances, this writer did advocate that skilled manufacturing workers not be permitted to emigrate.¹⁶⁷

¹⁶³ *Ibid.*, II (1759), 50, 126.

¹⁶⁴ *Ibid.*, V (1759), 160-61.

¹⁶⁵ See Chapter III, below, on Bielfeld.

¹⁶⁶ *Journal de commerce*, V (1760), 46-50.

¹⁶⁷ "Des hommes," *ibid.*, VI (1760), esp. pp. 95-96, 100-01.

CHAPTER III

THE REPOPULATIONISTS

TWO BELIEFS—that population was not growing in France and that population growth was susceptible of stimulation by the state—gave rise to a considerable volume of straight repopulationist literature in the eighteenth century. Awareness of depressed economic conditions and of the disposition of ruralists to abandon agriculture, together with Montesquieu's assertion that France was less peopled than formerly, gave widespread currency, in the middle portion of the century, to the belief that France's population had diminished and was diminishing. Following the appearance of Mirabeau's *L'ami des hommes* (1756), asserted Messance,¹ "nearly everybody, upon the word of the author, believed in the depopulation of France." Messance's testimony is supported by Baron Grimm,² by the records of parlements,³ and by the complaints of those who believed the marriage rate had fallen dangerously low and that family size was being curtailed.⁴ Moreover, despite the statistical findings of Expilly,⁵ Moheau,

¹ *Nouvelles recherches*, p. 4; *Recherches*, Preface. See Chapter VII for full titles.

² In a letter written in October, 1766, Grimm said that Messance's assertion that the population of France had increased since 1700 was contrary to "all remonstrances that all the parlements have made to the king for fifteen years, to all the ideas spread through all the political writings which have appeared in the same space of time, and to opinion generally received among enlightened men and among the people" (Grimm, *Correspondence*, Paris, 1813, Part I, V, 316).

³ For example, in the records of the Parlement of Provence it is noted that population growth is essential to the prosperity of the state; that excessive taxation is causing emigration from rural areas and reducing nuptiality; that marriages are becoming less fecund in consequence of heavy taxation, depravation of the *mœurs*, the spread of both ambition and indolence, and the misery of the people. It is proposed that fathers of large families be exempt from taxation; that the income of agriculturalists be increased sufficiently to prevent rural depopulation and thus to insure a supply of soldiers and sailors (P. A. Robert, *Les remonstrances et arrêts du Parlement de Provence au XVIII^e siècle, 1715-1790*, Paris, 1912, pp. 517, 640-41). Preliminary inquiry suggests, reports my colleague, S. T. McCloy, that around and after 1760 large families in need were often aided on populationist grounds.

⁴ See my *France Faces Depopulation*, pp. 41-52, 102-07, and "Birth Prevention in France," *Marriage Hygiene* (May and Aug., 1936).

⁵ *Dictionnaire géographique, historique et politique des Gaules et de la France* (Paris, 1760-70); avertissement and article "Population"; also *De la population de la France* (Amsterdam, 1765).

and Messance,⁶ and the well-founded claims of other scholars, the belief that the population was growing slowly, if at all, did not wholly disappear in the last quarter of the century. So late as 1793 Arthur Young could write that "many croaking writers in France have repeatedly announced the depopulation of that kingdom."⁷

In this chapter we shall outline the views and programs of a number of writers who were interested primarily in the establishment or restoration of conditions favorable to population growth. Most of these authors were alarmed at the seeming demographic decadence of France, some because they believed population growth to be a principal source of the political and economic strength of the community, and others because they believed the (alleged) nongrowth of the population to indicate an underlying lack of health in the social structure and the *mœurs* of the French people: their views, on the whole, reflect a simple humanitarian, or proto-humanitarian, value scheme, rather than that of the mercantilists. Most of the writers treated in this chapter supposed that population growth could be accelerated through the introduction of appropriate reforms—a belief that did not lose adherents until men came to accept the view that human affairs are subject to "natural" laws, rather than to the fiat of a positive state or a positive church.

I

Of the essentially populationist works which exercised influence in France in the eighteenth century, the cameralistic treatise of Baron J. F. de Bielfeld approximates most closely the philosophical outlook⁸ of the mercantilists.⁹ "It is necessary to have

⁶ In 1788 Messance claimed that "as day chases night," so did his simple, well-arranged facts "dissipate errors and fix opinion." One no longer heard the "anti-patriotic cry" of the 1750's and early 1760's: "France is depeopled, she lies fallow, she is on the brink of ruin" (*Nouvelles recherches*, pp. 1-2).

⁷ *Travels in France* (Dublin, 1793), II, 380. This view was absurd, Young declared.

⁸ The marshal, Herman Maurice de Saxe (1696-1750), was mercantilistic in outlook. Believing with Montesquieu that population had diminished, he listed six checks to propagation: vice, debauchery, sterility, misfortune, unhappiness in marriage, and religion (Christian asceticism and interdiction of divorce; Mahometan polygamy). He proposed that mothers be assigned "an independent part of the family income," and that pensions of 100, 500, and 1,000 crowns be granted mothers of 10, 15, and 20 children, respectively. He proposed further that since married couples remained child-

a care for the increase and maintenance" of the population, he said, for "the true strength of the state consists in the number of inhabitants."¹⁰ He characterized as "absurd" the allegation that a state could be "too much peopled," or that the earth would be overpopulated, were it not for wars, pestilence, and other plagues. "Half the known world still lies fallow."¹¹ There were virtually no limits to the augmentation of either agricultural or nonagricultural production. "Experience proves that the proportion between the amount of labor employed in agriculture & the quantity of product always marches in uniform progression, & that the multiplication of grain could be pushed excessively far, if there were more hands to work on the land. . . . Industry and commerce have no limits."¹² As population grows, there are more workers for all enterprises, more taxpayers, more animals to make manure for the fertilization of the soil. He pointed to the wealth of great cities as evidence of the advantages of population density. To the charge that Switzerland was overpopulated, he replied that the industries of Switzerland were

less when one member was sterile, or husband and wife had become "irksome to one another," all married couples who had produced no children for five years be separated; for the acquisition of new mates would fire the procreative urge. He proposed further that while couples which had thrice renewed their marriage and reared children must be declared inseparable, couples married for shorter periods, and with children, be permitted to separate at the end of five or ten years of married life. He suggested finally that the facilitation of early marriage would diminish debauchery and sterility, inasmuch as then men and women would be less likely to indulge in premarital sexual practices. "But nature during this time [prior to marriage] is unwilling to be deprived of her dues, and commits trespasses by which the generative faculties become at length enervated; debauchery of every kind takes place" (*Reveries or Memoires upon the Art of War*, London, 1757, chap. xvi). The French edition was published at Amsterdam, 1757.

⁹ J. F. de Bielfeld, *Institutions politiques* (The Hague, 1760). This is essentially a cameralistic guide for rulers. Bielfeld, though a German, first published his books in French; he relied in large measure upon French data and writers. He referred to every important French writer who had written prior to 1759 and, in a chapter dealing with "political arithmetic" (*ibid.*, II, chap. xiv) and its history, named nearly all the English and Continental writers on this subject and summarized the works of a great many.

¹⁰ *Ibid.*, I, chap. v, sec. 13, also chap. xi, sec. 17, and II, chap. xiv, sec. 11.

¹¹ *Ibid.*, I, chap. v, sec. 25.

¹² *Ibid.*, II, chap. xiv, sec. 11. Here Bielfeld is criticizing the anonymous French author of *Essai de politique & de morale calculée* (London, 1752), only a few copies of which had been printed for private distribution. This author, who sought to reduce all social science to mathematically demonstrable principles, held that given lands always yielded as much as they could yield, and that unrestricted population growth reduced the level of individual comfort (Bielfeld, *op. cit.*, II, chap. xiv, secs. 9-11).

not fully developed.¹³ He added that no matter how peopled a state, it could import subsistence if necessary.¹⁴ In short, Bielfeld refused to admit that there might be essentially nonmodifiable limits to the augmentability of the food supply, or that population growth might make impossible the attainment of "the end of societies," which is "le bonheur."¹⁵

Bielfeld apparently did not believe that the population of a state naturally and necessarily grows as rapidly and as much as is desirable. He did imply, when discussing whether or not the world was less populated in the eighteenth century than in ancient times, that numbers remain comparatively constant, since Nature's operations and proportions remain constant.¹⁶ Nonetheless, he listed "depopulation" among the possible causes of national decay,¹⁷ stated that one "country can augment the number of its inhabitants at the expense of another,"¹⁸ and enumerated many checks to population growth. Among these checks he included pestilence, war, famine, dearth, floods, and earthquakes; debauchery and drunkenness; religious intolerance and massacres; ecclesiastical celibacy; too extensive colonial and distant commercial expansion; burdensome taxes which cause subjects to emigrate or to avoid marriage; emigration; lack of security; mendicity; vagabondage; venereal disease, which prevents marriage and corrupts the "blood"; infanticide; "sodomy, & the progress of all sins . . . against nature";¹⁹ dueling;²⁰ and barbarian invasions.²¹ He described monogamy as favorable to population growth, and divorce and polygamy as unfavorable.²² He considered "misery [to be] very destructive for the human

¹³ *Ibid.*, I, chap. v, sec. 25, xi, sec. 17; II, chap. xiv, sec. 11. In one place (I, chap. v, sec. 25) he almost says that men can live by taking in each other's washing.

¹⁴ *Ibid.*, II, chap. xiv, sec. 11.

¹⁵ *Ibid.*; also I, chap. x, sec. 3.

¹⁶ *Ibid.*, II, chap. xiv, secs. 31-32, 38. Following Süssmilch, he estimated the population of France at 20 million; Europe, 150; the world, 950 (*ibid.*, II, chap. xiv, sec. 60).

¹⁷ *Ibid.*, II, chap. xv, sec. 32. This section is chiefly an attack upon ecclesiastical celibacy.

¹⁸ *Ibid.*, II, chap. xiv, sec. 38. As has been shown, he believed that good policies would greatly augment a nation's food supply.

¹⁹ The checks already named are listed in *ibid.*, II, chap. xiv, sec. 45. He refers to several of them in I, chap. v, secs. 13-17, where (secs. 16-17) he condemns the Spanish method of colonization.

²⁰ *Ibid.*, I, chap. v, sec. 18. Fifty duels a day were fought in France, he said.

²¹ *Ibid.*, II, chap. xv, sec. 6.

²² *Ibid.*, I, chap. v, sec. 13.

species."²³ He seems not to have considered luxury a check; for although he once referred to it as unfavorable to population growth,²⁴ and condemned the diversion of men from manufactures into domestic service,²⁵ he described luxury expenditure as a source of wealth, employment, and civilization.²⁶ Furthermore, he favored economic liberty on the whole, looked upon "opulence" as the source of a nation's well-being,²⁷ and subscribed to the view that man naturally seeks to better his condition.²⁸

Bielfeld enumerated many conditions that are conducive to population growth and that ought therefore to be established by rulers. "The first and most natural is by encouragements to marriage."²⁹ Judging from his extensive treatment of manufacturing, commerce, finance, and agriculture, he believed that marriage could best be facilitated by augmenting employment and limiting the tax burden. Among the factors favorable to population growth he included healthfulness of the environment; peace, sobriety, good *mœurs*, and measures suppressive of prostitution and venereal disease; "severe laws against sodomy" and other "sins . . . against nature"; permission for ecclesiastics to marry; the establishment of religious tolerance and other conditions attractive to both immigrants and natives; precautions against famine, dearth, floods, and other scourges; abolition of monopolies; humanitarianism in government, and justice in the administration of law; improvement of the conditions under which sailors then worked and lived; foundling hospitals.³⁰ He preferred hiring foreign mercenaries in so far as possible, since

²³ Misery "is the source of the too great continence of married Subjects, of emigrations, of epidemic maladies, of intemperance, of robberies, and of quantity of other evils which desolate, which depeople the State" (*ibid.*, I, chap. v, sec. 19).

²⁴ *Ibid.*, I, chap. v, sec. 15.

²⁵ *Ibid.*, I, chap. xiii, sec. 31. The state must limit the number of valets each citizen may have (*ibid.*). Elsewhere (I, chap. xiv, sec. 45) he says that the state must take care that luxury does not develop out of proportion to the means of the country.

²⁶ *Ibid.*, I, chap. xi, sec. 18; chap. iv, sec. 20. He was influenced by Melon.

²⁷ *Ibid.*, I, chap. x, secs. 3, 6.

²⁸ *Ibid.*, I, chap. xiv, sec. 8.

²⁹ *Ibid.*, I, chap. v, sec. 13.

³⁰ *Ibid.*, II, chap. xiv, sec. 45. Elsewhere he advocates hospitals for the disabled, retreats for the aged, and the stimulation of medical science and of inventions favorable to the conservation of men (*ibid.*, I, chap. v, secs. 20-24, 27). Although he looked upon religion as necessary to the existence of the State, he apparently considered Catholicism, with its celibacy and intolerance, less favorable to population growth than Protestantism (*ibid.*, I, chap. v, secs. 28-31; II, chap. xiv, sec. 45).

"one augments by this means the number of subjects, which is no small advantage."³¹

II

Mid-eighteenth-century populationism is best represented in the works of Plumard de Danguel, Goyon de la Plombaine, and Jaubert.³² Danguel was concerned primarily to combat celibacy,

³¹ *Ibid.*, I, chap. xvi, sec. 6. Montesquieu had said (*Considérations sur les causes de la grandeur des Romains & de leur décadence*, 1734, chap. iii) that the army of a state could never safely exceed in size one per cent of the population. This commonly accepted rule was repeated in the *Encyclopédie* ("Armée," I, 1751, 694): "A prince who has a million subjects cannot raise an army of more than ten thousand men without ruining himself." Moheau (*Recherches* [see below], II, 122) describes this rule as "an old maxim, adopted by all Publicists and Statesmen without examination"; its validity, he said, depended upon the circumstances surrounding military life. Bielfeld (*op. cit.*, I, chap. xvi, secs. 4-9) denied the applicability of this maxim. Were a state continuously at war, he said, 200 inhabitants would be required to support one soldier; in time of peace less than 100 were required. In general, the revenues of a state, and not the size of its population, determined how large an army a state could support. Bielfeld rejected Saxe's proposal that everyone be compelled to serve five years in the army. Such a regulation would be infinitely harmful to manufacturing, diverting men from industry. Moreover, after six or seven years of peace the army would include no one who had been under fire. In general, a well-trained professional army was preferable, to be supplemented in rare instances by a militia (see n. 34 below on militia).

Acceptance of the rule of one soldier per hundred inhabitants, together with failure to note the dependence of military power upon matériel and of the supply of both matériel and mercenaries upon national and per capita productive power, apparently accounts in considerable measure for the belief of statesmen and publicists that a nation's military power was fixed largely by the size of its population. The population factor occupied an important role in the eighteenth-century conception of a national and popular army, which materialized in the Napoleonic period. (For an account of the shift in emphasis in eighteenth-century military philosophy from a standing to a national and popular army, see A. Vagts, *A History of Militarism*, New York, 1937, pp. 33-35, 61-63, 77-95.) Comparison of military history, theory, and method with population theory indicates that the exponents of large populations made no real effort to get to the bottom of the relation between a state's political and military power, on the one hand, and the number and quality and general state of its population, on the other; it was easier to repeat uncritically maxims such as that cited above.

³² The catchall character of eighteenth-century populationist programs is suggested by the contents of three prize-winning Berne (Switzerland) essays published in Paris in 1766 (*Essays on the Spirit of Legislation in the Encouragement of Agriculture, Population, Manufactures and Commerce*, Newark, 1799. Morellet listed the French edition in his *Prospectus*). The authors, J. Bertrand, B. Carrard, and S. de Corrovan, were influenced by Montesquieu, Saint-Pierre, Goudar, and Melon, among others. The essayists asserted that fertility and marriage rates were governed by the abundance of commodities and the standard of living; yet they urged governmental stimulation of population growth, saying that no country was fully peopled, and that population growth enriched both the individual and the nation. Among the measures they recommended are the following: abolition of misery and creation of abundance of commodities through development of agriculture and industry; elimination of unemployment through establishment of a multiplicity of occupations; limitation of international trade

the principal check (in his opinion) to population growth; for he looked upon such growth as a "certain sign" of the "health of the body politic," as a stimulator of agriculture and manufactures, and as a partial source of relief to taxpayers (the cost of government being relatively fixed).³³

The causes of celibacy, he implied, were both general and special in character. Among the general causes were standing armies (whose members seldom married, even in times of peace); religion, which diverted five hundred thousand from the marital state; formalities, which rendered marriage difficult; the opposition of masters to marriage on part of their domestics, and of ministers of state to marriage on part of the poor; and economic inequality which gave rise to love of luxury and, in consequence, to fear of both marriage and its burdens. Luxury-loving men dreaded the cost of educating children, deeming it "more seemly to have six horses in [the] stable, than to supply the State with children and live in mediocrity"; whilst luxury-loving women became unduly effeminate and disposed to look upon motherhood as "troublesome" and upon nursing as "improper." Within each social class special circumstances operated to prevent mar-

to the importation of necessities and the exportation of nonessential commodities, with national self-sufficiency as the goal; establishment of public granaries to insure against famine; maintenance of a form of government that is just and mild and guarantees liberty of conscience and security of property; equitable distribution of tax burden; abolition of all forms of slavery; denial of alms to the able-bodied poor; prevention of war, and precautions against earthquakes; prevention of migration from rural areas; promotion of the immigration and naturalization of foreigners; education suited to make children useful; complete cessation of the consumption of luxuries; restriction of military and ecclesiastical celibacy; stimulation of marriage through the suppression of libertinism and the granting of preference with respect to employment in some occupations to married persons and parents; fostering the consumption of health-giving waters and of fish and other foodstuffs "proper for generation"; establishment of hospitals and foundling homes; provision, at public expense, of the services of midwives and physicians; laws conducive to the improvement of public health and to the control of smallpox and venereal disease; regulations designed to prevent the practice of medicine by quacks.

³³ N. Plumard de Danguel: *Remarques sur les avantages et les désavantages de la France et de la Gr. Bretagne* (Leyden, 1754), pp. 266, 270. This work was described as a translation from the English of John Nickolls, Danguel, a relative of Forbonnais, and a French official, preferring to write pseudonymously. Danguel, who accepted much of the laissez-faire philosophy, studied Spanish mercantilism (translating a work of Bernard de Ulloa in 1753), and (at the suggestion of Gournay) the works of Josiah Tucker, many of whose opinions he adopted; he approved Decker's proposed single tax upon luxuries.

riage or otherwise check population growth. Among the nobility the practice of assigning the bulk of the property to the eldest son, together with the desire to perpetuate but one "powerful" noble familial line, led many younger sons and daughters to become religious celibates and frequently rendered difficult the marriage of the others. Members of the commercial class, realizing the disesteem in which they were held, sought to accumulate funds and purchase patents of nobility; therefore they did not multiply as they otherwise might. In the artisan class growth was checked by apprenticeship regulations, by limitations upon the right to practice trades, and by taxes incident upon artisans and their products. In the class to which belonged peasants and laborers, heavy taxes, together with extreme poverty and the burden of militia service (which often caused ruralists to abandon agriculture),³⁴ checked propagation; moreover, many ruralists were attracted to cities by the prospect of membership in the relatively useless and infertile urban servant class. "In France, the religious state, the military constitution, the prejudices of the nation in respect to the nobility, excessive inequality in the distribution of wealth, luxury, [and] poverty combine to arrest [propagation]."

The forces unfavorable to population growth operated more powerfully in some social classes than in others. Both the marriage rate and fertility within marriage were lower in the military class than in any other group; they increased in the following order: magistrates, financiers, merchants, artisans, comfortable laborers, and uncomfortable laborers. In general, Danguel concluded, the French social system valued least and burdened most heavily the more useful classes, and thereby checked their increase and that of the population as a whole.³⁵

³⁴ In France in the eighteenth century a militia of 60,000 to 75,000 was recruited annually in addition to the standing army. While this number was small, the service was onerous and, because of exemptions, fell solely upon the poorest portion of the population, principally those in agriculture ("Milice," *Encyclopédie*, X, 504-05; Levasseur, *Histoire des classes ouvrières*, II, 721-22; also De Villeneuve, below). When Mes-sance (*Nouvelles recherches* [see below, Chapter VII], p. 62) said that only one "garçon" in 54 was annually needed to recruit the militia, he overlooked the horror in which the service was held by families of potential recruits. It was often advocated that every parish be permitted to hire as many recruits as it was called upon to supply and thus avoid disrupting agricultural life ("Milice," *Encyclopédie*, X, 505).

³⁵ The three preceding paragraphs are based upon *op. cit.*, pp. 15-33, 45-48, 62-64,

He suggested a number of measures to stimulate marriage and propagation: (1) the diversion of public funds from the support of community fetes to the dowering of needy boys and girls; (2) the dowering each year of a number of boys and girls on condition that they clear and settle designated areas of land, said land to be provided by great landowners; (3) exemption of rural families with a designated number of children from certain taxes; (4) basing rank among equals in public assemblies upon number of children; (5) depriving unmarried subjects of the right to fill the better positions in the Magistrature and other branches of public service,³⁶ of the right to vote in elections, and of the right to serve in parlements; (6) denying to every celibate aged thirty or more years the right to receive property as a collateral heir or as the recipient of donations and gifts, except on condition that he marry within a year after receipt of said property; (7) the imposition of extra taxes upon childless widows and widowers; (8) the imposition of a special tax on all celibates aged fifteen or more years, said tax to increase with the age of the celibate and to be paid, in the case of minors, by the parents; (9) placing a tax on all employers of domestic servants, said tax to increase progressively according to the number of servants, to vary according to the height of male servants (so that the robust would be conserved for agriculture and military service), and to be heavier in the case of unmarried servants.³⁷

Such other populationist measures as he supported were very general in character. He recommended facilitating the naturalization of immigrants, at least of those of good quality; for often they introduced new industries; and their coming enabled a state to spare some of its own citizens for colonial development.³⁸ Apparently believing that population growth is conditioned by

309-10, 316-22. Danguel recommended that information on natural increase by class be gathered in order that it might be determined what types of social organization and occupation were most favorable to natural increase (*ibid.*, pp. 272-83).

³⁶ This measure was not to apply to military service or to branches of the public service which required superior talents.

³⁷ Danguel, *op. cit.*, pp. 322-26.

³⁸ *Ibid.*, pp. 326-40. The labor gain to a state from immigration, Danguel believed, as did many of his contemporaries, was double: the migrant was deducted from the labor supply of the state of origin and added to the labor supply of the state of destination.

the volume of subsistence³⁹ and by the volume of employment actually made available, he urged that the state "multiply the means of employing men," set the poor to work, and establish manufactures in rural districts to provide work for peasants at times when agriculture did not engage them. He was careful (as a result of Melon's influence) to point out that since the number of jobs is not fixed, and since employment tends to expand so long as economic liberty prevails and labor can "circulate," neither immigration, nor invention, nor the use of labor-saving machinery, served to increase unemployment. Finally, unlike some of his contemporaries, he vaguely recognized the principle of diminishing utility, and its correlate, a dynamic optimum interregional and interoccupational balance; therefore, he did not emphasize agriculture or manufacturing at the expense of the other.⁴⁰

III

H. de Goyon de la Plombaine, who was interested primarily in the promotion of population growth,⁴¹ implicitly assumed that such growth was generally conducive to the strength of the state and to the welfare of the people, even though he listed but one specific advantage of population growth, namely, that it increased the revenue of the state.⁴² Although he admitted that France might have been more populated in the sixteenth century, he did not emphasize the supposed decline in numbers, merely observing that under existing conditions population was growing less

³⁹ Employment depends upon consumption, consumption upon cheapness, cheapness upon the price of manual labor; the price of manual labor "follows the price of things necessary to life, as its general and most immediate guide [règle]" (*ibid.*, p. 293).

⁴⁰ *Ibid.*, pp. 288, 291, 293-302, 336-37. Danguel did not completely avoid the common error of his day: that certain occupations are always inherently more valuable to the nation than others. Thus luxury production was good only if directed by "well-ordered" consumption. "There are different degrees of necessity and of utility among these employments" (*ibid.*, p. 288).

⁴¹ *L'homme en société, ou nouvelles vues politiques et économiques pour porter la population au plus haut degré en France* (Amsterdam, 1763). In a less important subsequent work (*L'unique moyen de soulager le peuple et d'enrichir la nation française*, Paris, 1775) Plombaine advocated state intervention for the relief of the people, particularly in the form of regulation of commerce in grain.

⁴² *L'homme en société*, I, 258, also 14-15.

rapidly than it might,⁴³ and that existing obstacles to population growth needed to be removed.⁴⁴

While Plombaine considered population to be "the fruit of an abundant production of the soil & of a brilliant commerce,"⁴⁵ he believed that demographic growth was being checked not only by conditions unfavorable to agriculture, but also by circumstances which directly checked marriage and propagation (e.g., military life, extensive employment of domestics, libertinism). The population was not distributed among classes and occupations in a manner conducive to population growth and national welfare. Of merchants, fabricators of nonessentials, and domestics there were too many; of healthy agriculturalists and necessary tradesmen and artisans, too few. Whence there ensued, on the one hand, cutthroat competition between merchants and persistent efforts to establish monopolies; on the other, actual or threatened deficits of indispensable goods and services. Moreover, over two hundred thousand recruits were required annually to fill gaps in the absolutely or relatively nonreproducing domestic, military, ecclesiastical, and merchant classes.⁴⁶

He suggested three sets of reforms intended, respectively, to restore a proper occupational balance, to foster natural increase, and to suppress prostitution and libertinism, in his opinion the most powerful of the checks to population growth. He advocated, as means of guarding agriculture and the necessary occupations against loss of their labor supply: (1) restrictions upon the employment of domestics; (2) extension of exemption from militia service to persons regularly engaged in agriculture, to competent sons of masters of trades, and to sons of rural bourgeoisie owning thirty thousand or more livres of landed property, and denial of such exemption to urban domestics and to persons living in, but not actually citizens of, cities free of the obligation to supply recruits.⁴⁷ He proposed two measures to achieve the first objective and in general to improve the lot of domestics.

⁴³ *Ibid.*, I, 34, 43-46. He estimated the population at 20 million. The editor of the work commented that the population scarcely exceeded 17 million (*ibid.*, II, 7). Plombaine cited Vauban, Abbé de Saint-Pierre, and Comte de Boulainvilliers.

⁴⁴ *Ibid.*, I, 34.

⁴⁵ *Ibid.*, I, 10, 15.

⁴⁶ *Ibid.*, I, 24-27; II, 4-5, 8, 11-12, 236.

⁴⁷ *Ibid.*, I, 61-65; II, Bk. V.

First, the number of domestics was to be limited through the imposition of a progressive tax on the employer of *French* domestic servants, said tax to vary according to the type of domestic service and to be quadrupled for each additional domestic employed. Bourgeois and ordinary employers of domestics were to be required to pay double the tax imposed on noble and on foreign employers. Employers of *foreign* domestics were to be exempt. Second, the mode of life and conditions of employment of domestics were to be placed under police supervision, with a view to inducing them to marry and reproduce. The proceeds of the tax on employers of domestics were to be employed for six years to create establishments in which the families of domestics could live and partly support themselves. Children of domestics were to be enabled to follow the parental occupation.⁴⁸

His measures for the stimulation of propagation applied principally to the upper classes, and only secondarily to the common man. With respect to the nobility and the upper bourgeoisie he advocated moral and educational reforms, pensions, and the deferment of final religious vows until the twenty-fifth year. Regarding education and morals he proposed specifically that: (1) each daughter be given a pension of one hundred livres and simple training at home in place of such luxury-inculcating education as was provided in existing educational institutions; (2) sons be educated at home (and later enrolled in regiments) rather than at military schools where they acquired tastes for luxury and libertinism. For the relief of indigence in noble and selected bourgeois families he recommended pensions: three hundred livres to each male child of a noble who had served the king ten years, and two hundred livres to each male child of a bourgeois who had served the king five years as a lieutenant and had married the daughter of either a noble or a commissioned bourgeois military man. This system of pensions, Plombaine believed, would assure the king of three hundred thousand noble and bourgeois military effectives, and of many upper-class families financially able to improve their landed property; it would also lead many in the upper classes to marry and have "a numerous posterity."⁴⁹

⁴⁸ *Ibid.*, II, Bk. V, esp. pp. 21-28, 86.

⁴⁹ *Ibid.*, II, 89-120, 231.

His proposed measures for the relief of the common man apparently had a threefold purpose: augmentation of the labor supply; increase of propagation; aid for agriculturalists. He recommended that partly disabled soldiers not be hospitalized but be pensioned (100-150 livres) in order that they might live with their families and do such work as their condition permitted.⁵⁰ He recommended further that foundlings (numbering about 12,000 per year) be placed with peasant families and trained in agriculture, the peasant family to receive 72-80 livres per year for the support of each foundling until the latter attained the thirteenth year; thereafter the foundling would produce more than his (or her) maintenance. Upon completion of his (or her) twenty-fourth year and attainment of the state of free agency the foundling would be dowered (300 livres to males, and 200 to females) in order that he (or she) might more easily marry. Hospital revenues were to be employed to dower and support foundlings. Out of the unexpended and unneeded hospital revenues, pensions (about 90,000, Plombaine estimated) of 40 (in rural areas) and 60 (in cities) livres were to be granted to selected parents of good character (with less than 300 livres of landed property) for each child beyond the second.⁵¹

Plombaine attributed the low level of natural increase in the cities and in the upper classes to prostitution and libertinism, which reduced the frequency of marriage, weakened marital ties, and spread venereal disease, which, in turn, led either to sterility or to incapacity to produce healthy offspring. Libertinism had originated among the idle and luxury-loving wealthy and nobility of Paris; it was spreading to all classes, many men already preferring single licentiousness to marital life. The children of noble families were few in number and often sickly. Commoners "aped" the nobility, and often married solely for convenience or to provide a legitimate heir. He believed that if female libertines were stigmatized, and if the opportunity for illicit sexual relations were reduced, marriages would increase, and the *mœurs* would be improved. Accordingly, he recommended rigorous policing of prostitutes and mistresses: a limited number of houses

⁵⁰ *Ibid.*, II, 103-07. Elsewhere (*ibid.*, Bk. IX) he proposed workhouses as means of making criminals partly self-supporting. ⁵¹ *Ibid.*, II, 122-74, 204-08.

and registered prostitutes would be assigned to each city; both prostitutes and mistresses would be required to wear a special garb; mistresses would be required to live under police surveillance and pay a high tax. Infraction of these regulations would be severely punished.⁵²

IV

The opinions of Abbé Pierre Jaubert, while more varied than those of Danguel and Plombaine, were essentially similar in character. France contained only half as many people as her agriculture could support; there was reason to suppose, furthermore, that depopulation would spread and intensify the shortage of agricultural labor, augment the individual tax burden, and otherwise injure the state.⁵³ Although, as will be shown, Jaubert believed moral factors to be primarily responsible for the supposed nongrowth of the population, he accepted the opinion of Montesquieu, Forbonnais, and the agrarian writers that population tended to grow when men were assured the fruits of their labor and some comfort;⁵⁴ and that failure to cultivate all available land, coupled with the great and inequitable tax burden, was depressing agricultural production and retarding population growth. Therefore he advocated stimulation of the agricultural arts; protection of agriculturalists against their creditors; a redistribution of the tax burden; the use of idle urban workers to perform the *corvées*; and restrictions upon the crop-destroying wild game which were raised and protected for the benefit of the nobility.⁵⁵

Believing corruption of the *mœurs* to be the principal immediate check to population growth in France,⁵⁶ he portrayed at some length the existing condition of the *mœurs*. Youth no longer was educated to love virtue and useful labor, to live simply and patriotically and chastely, to value the philosopher more

⁵² *Ibid.*, II, 208-26, 229. Plombaine declared the use of cow's milk for children to be "contrary" to their "nature"; he recommended breast feeding, preferably by the mother (*ibid.*, II, 157-58).

⁵³ *Des causes de la dépopulation et des moyens d'y remédier* (London, 1767), pp. 2-8, 291. He cited the complaints of depopulation made in 1764-65 by the Parlements of Bordeaux and Dijon (*ibid.*, pp. 2, 5).

⁵⁴ *Ibid.*, pp. 133, 289.

⁵⁵ *Ibid.*, pp. 128-49, 276-95.

⁵⁶ Checks varied in character and importance from country to country, he observed.

than the dancing master. Instead, conspicuous display, avarice, sensualism, and libertinage reigned, even as in ancient Rome. "Indolence, ornamentation, pomp . . . , the ostentation of the wealthy, [and] great expenditures today occupy the place of merit." Men and women desired only to play and to consume a multiplicity of rapidly changing goods and services, with the result that physical health and proper regard for family life and children often were dissipated. Prostitution was destroying family life, spreading venereal disease and sterility, and undermining health and capacity to produce healthy children. Mothers, preferring uninterrupted pleasure to maternal duties and the health-giving effects of nursing their own children, were turning the latter over to mercenary wet nurses, who were less suited to furnish appropriate milk, unable to suckle both their own infants and those placed with them, unwilling to provide proper child care, and frequently diseased.⁵⁷

Most of Jaubert's proposed reforms apparently were intended to restore good *mœurs* and thereby increase propagation. Most important perhaps are his suggestions for the curtailment of celibacy and the counterbalancing of its effects. He recommended, as a means of reducing the effect of military and naval service, that war veterans be distributed among villages and employed on Sunday to train soldiers, and that similar arrangements be made in coastal regions for the training of marines; for then in times of peace members of the armed forces could marry and raise families. He proposed limiting the number of domestics (most of whom tended not to marry) by denying to other than artisans (who were not prone to enter domestic service) permission to abandon agriculture for urban employment, and by relying upon children, too young yet to enter trades, to satisfy the need for domestic service.⁵⁸ With respect to ecclesiastical celibacy he suggested that monasteries and nunneries be stripped of tax exemption and other privileges, and that there be established, in place of these institutions, rural retreats to which persons afraid of

⁵⁷ The above account is based upon *ibid.*, pp. iii, 13-37, 125-28. Infant mortality due to improper feeding was a chief cause of the urban excess of deaths over births (*ibid.*, p. 35).

⁵⁸ *Ibid.*, pp. 53-58, 119-24, 268-72. He proposed (*ibid.*, p. 121) that *curés* employ married domestics, or suffer them to be liable for militia service.

the world might repair and work, unencumbered by religious vows and free to return to the world.⁵⁹ He reserved the most stringent measures for the lay celibates⁶⁰ (who preferred an idle life on a fixed income to the burdens of the married state, and who were useless to the state and corrupters of the *mœurs*⁶¹): penalties upon celibates in contrast to privileges for parents (he mentioned the ancient Roman laws and Colbert's edicts); denial to celibates over twenty-five years of age of the right to inherit property from collateral relatives, or to share equally with other heirs in the patrimonial estate; denial to childless widows or widowers of the right to inherit property from the spouse dying first; enabling the state to confiscate half the property of celibate offenders against public morals, and use the same for the support of foundlings.⁶²

He suggested a number of other reforms designed to improve the *mœurs* and stimulate natural increase. He recommended replacement of primogeniture by a fairly even distribution of parental property; for primogeniture commonly involved the neglect of nearly all the children but the eldest, and these therefore frequently entered the Church or the armed forces, where they produced neither wealth nor children. He advocated small dowries, saying that the need to accumulate large dowries led par-

⁵⁹ *Ibid.*, pp. 45-49, 266, 277-78. Monasteries and nunneries, Jaubert said, had become corrupted by wealth, and frequently served as refuges for the idle and the lazy. The number of regular clergy was too small to affect population growth, he noted.

⁶⁰ He specifically excluded from this category persons who were temperamentally unsuited to marriage.

⁶¹ *Ibid.*, pp. 49-52. This group numbered one million, Jaubert said (*ibid.*, pp. 183-84). In the eighteenth century the *rentier* was frequently condemned. In general, he was looked upon as one who disembarrassed himself of the care of his affairs and of active participation in the life of the community. "The number of *rentiers* increases in a state only at the expense of labor and commerce, through idleness, luxury, indolence, sybaritism. A *rentier* is therefore a useless subject whose idleness imposes a tax upon the industry of others" ("Rentier," *Encyclopédie*, 1765, XIV, 121). The sale, by the state, of *rentes viagères* (this term seems to have been applied to the "tontine" and to the annuity *in reversion* as well as to the simple annuity which terminated upon the death of the annuitant) was condemned by a number of eighteenth-century writers as unfavorable to population growth. The *rentiers*, it was charged, did not want to jeopardize, through marriage and procreation, the level of comfort provided by their *rentes*. The French government began to issue annuities falling within each of the above three categories after the middle of the seventeenth century. Tontine loans were in favor after 1750 ("Finances de l'ancien régime," *Nouveau dictionnaire d'économie politique*, 2d ed., Paris, 1900, II, 1005-06; "Rentes viagères," *Encyclopédie*, 1765, XIV, 119-20).

⁶² *Op. cit.*, pp. 183-91.

ents to restrict the number of their children, that the marriage of dowered children frequently was inspired by the desire for wealth rather than by love, and that the marriage of the nondowered was rendered difficult and at times impossible.⁶³ He recommended finally that idleness be suppressed; that children be trained to live simply; that the fathers of wayward children be punitively taxed; that the marriage of repentant prostitutes be facilitated; that unrepentant prostitutes be branded and banished to their birthplaces; that unnatural sexual practices be suppressed; that women be induced to forego display and live in accordance with their station in life; and that "ladies of first rank" suckle their children and thus set a good example.⁶⁴

Jaubert did not suggest rigorous control of migration. Given satisfactory economic conditions in France, he seems to have believed, Frenchmen would not seek to emigrate, and immigrants would come voluntarily from Catholic countries; therefore he mentioned only a passport system of control. He opposed the development of colonies, saying they depeopled mother countries. He proposed instead an internal colonization scheme, whereunder untitled domestic land would be turned over for a small rent to soldiers and others who agreed to marry and cultivate this land; and the use of foundlings in domestic agriculture, rather than in the colonies.⁶⁵

Jaubert was critical, as were many writers, of the French hospital⁶⁶ and penal systems. Believing that foundlings often acquired diseases from mercenary nurses who had been infected by the foundling children of debauched parents, Jaubert recommended that only nurses of good health and morals be employed by foundling hospitals, and that unmarried mothers be compelled, in exchange for a small monthly sum, to nurse their children. He advocated further that foundlings be educated slightly and apprenticed as sailors, or agriculturalists, in order that they might eventually marry.⁶⁷ As substitutes for the hospitals for invalids,

⁶³ *Ibid.*, pp. 38-44, 179-82.

⁶⁴ *Ibid.*, pp. 153-60, 166-78, 273, 295-98.

⁶⁵ *Ibid.*, pp. i-ii, 59-61, 201-07. He opposed deporting undesirables to colonies, saying that as they died there because of bad climate, France gained nothing (*ibid.*, pp. 62-63).

⁶⁶ In the eighteenth century hospitals often served both as asylums for foundlings and destitute persons and as refuges for the sick.

⁶⁷ *Ibid.*, pp. 63-69, 211-14.

half of whom died of bad medication and diseases contracted there, he proposed both hospitals operated by nuns and state-subsidized treatment at home and in lodginghouses for the sick.⁶⁸ Able-bodied beggars, theretofore supported by hospitals, were to be put to work.⁶⁹ Workhouses, especially those controlled by monks, needed to be humanitarianized, and penalties for various crimes needed to be reduced.⁷⁰ Given reforms of the type suggested, mortality would be reduced and more individuals would be made useful and inclined to marry and procreate.

Jaubert considered urban conditions unfavorable to health both because the air was poisoned by exhalations from workshops, from the sick, and from too shallow graves,⁷¹ and because urbanites ate and drank too much and kept late and irregular hours. He advocated an improved urban water supply, enlargement and frequent cleaning of the streets, daily filth removal, and the location of certain establishments (cemeteries, tanneries, etc.) outside cities.⁷²

V

The Chevalier de Cerfvol enumerated the principal checks to population growth operative in France and discussed the means whereby they might be countered.⁷³ The French population, he supposed, had declined from twenty-four millions under Charles IX to nineteen millions in 1700; and while it was again increasing, it was not increasing as rapidly as possible and might even begin to decrease again.⁷⁴ Therefore steps to stimulate population growth were necessary.

⁶⁸ *Ibid.*, pp. 72-73, 222-31. ⁶⁹ *Ibid.*, pp. 215-21. ⁷⁰ *Ibid.*, pp. 78-101, 241-50.

⁷¹ There was constant complaint, in the eighteenth century, of the unpleasant odors and of the dangers to health occasioned by the burying of the dead in cemeteries in the cities and under conditions not permitting deep interment (A. Franklin, *La vie privée d'autrefois*, Vol. VII on *L'Hygiène*, Paris, 1890, pp. 77-78, 195-223).

⁷² *Op. cit.*, pp. 74-78, 232-34. Jaubert noted higher morbidity rates in cities, but apparently considered epidemics an unimportant check in rural and urban areas (*ibid.*, pp. 74-75, 152).

⁷³ *Mémoire sur la population dans lequel on indique de la rétablir, & de se procurer un Corps Militaire toujours subsistant & peuplant* (London, 1768). In my *France Faces Depopulation* I attributed this memoir to J. F. de Villeneuve. De Cerfvol also wrote *Législation du divorce* (London, 1769) and *La gamologie, ou de l'éducation des jeunes filles destinées au mariage, ouvrage dans lequel on traite de excellence du mariage, de son utilité politique et de sa fin et des causes qui le rendent heureux ou malheureux* (Paris, 1772).

⁷⁴ *Mémoire*, pp. 30-33, 40-46. Four children were necessary for the replacement of a family, he estimated.

In his discussion of checks to population growth De Cerfvol pointed out that mere abundance of goods did not suffice to assure population growth, inasmuch as man's propagative behavior depended upon the *mœurs*.⁷⁵ The most active cause of depopulation was "incontinence," which had cost France several millions of men since the day of Francis I and had enervated many others. Many women, he said, conceived only in spite of themselves and because nature overcame the ruses which, despite the threat to physical health, were employed to frustrate her; they "employ everything to cut down their fecundity, and attenuate its results. It enters the plan of some households to have no children or only one."⁷⁶ Next in importance as a check was celibacy, which had its origin in religious and civil institutions and in man's dread of an indissoluble marriage contract; for celibacy diverted many men and women from assuming the role of parent, and at the same time conduced to libertinage, which in turn entailed disease, sterility, and high foundling mortality.⁷⁷ Among the subordinate causes of depopulation he placed: mercenary wet nursing; the efforts of girls to reduce their figures, a practice which interfered with their physiological capacity to deliver well-formed children; and the ease with which children could get an education that made them unwilling to do useful work.⁷⁸ War, disease, emigration, and military and naval occupations also were named as checks,⁷⁹ but not luxury and heavy taxation. However, he recommended heavy taxes upon luxuries, even though he considered the evidence insufficient to show that "luxury" depressed population growth;⁸⁰ and while he denied that heavy taxation was an important check, since families were small in classes not exposed to onerous taxes, he believed the rural tax burden too great.⁸¹

De Cerfvol advocated two population-stimulating reforms in his *Mémoire*: legalization of divorce and facilitation of the marriage of soldiers. Legalization of divorce would dispose more

⁷⁵ *Ibid.*, pp. 30-32.

⁷⁶ *Ibid.*, pp. 7-8 n.

⁷⁸ *Ibid.*, pp. 21-23.

⁷⁷ *Ibid.*, pp. 9-10, 48-60.

⁷⁹ *Ibid.*, pp. 40-44.

⁸⁰ *Ibid.*, p. 19. Assuming that luxury checked population growth, he said elsewhere, this check would become less operative, given divorce, for then those living in the married state would love one another and prefer having a family to frivolity and luxury (*ibid.*, p. 90).

⁸¹ *Ibid.*, p. 13.

men and women to assume the risks of marriage; it would also facilitate the marriage of nonvirgins, reduce libertinage, and bring together spouses who loved one another.⁸² To establish a substantial self-perpetuating army De Cerfvol proposed: (1) that the state allow two sous per day to the wife of a soldier, and one sou for each living child; (2) that the wives and children of soldiers be housed in buildings taken from religious communities; (3) that the state grant credit to soldiers' families to enable them to clear and cultivate untilled land; (4) that in event of death of the soldier father, the male children be supported by the state and later be permitted to enter the employment of the state, and the female children be provided for in religious institutions. Such regulations would improve the *mœurs* by causing soldiers to marry, lead to the birth of robust children, and induce foreigners to enter the French Army.⁸³

VI

J. Faiguet de Villeneuve (1703-1780), military paymaster at Chalons, published two works on means whereby population growth might be stimulated, its quality improved, and the economic condition of the people bettered.⁸⁴ The natural sexual urge was strong enough to assure adequate propagation, he reasoned, provided that men were free to marry and enjoyed the opportunity to engage in useful and necessary work and amass property.⁸⁵

⁸² *Ibid.*, pp. 25-28, 61, 89-90, 97-98. De Cerfvol apparently was influenced by the opinion of Maurice of Saxe with respect to remarriage (*ibid.*, p. 102); he was familiar also with the works of Saint-Pierre and Hay.

⁸³ *Ibid.*, pp. 104-15. In "Invalides," written for Diderot's *Encyclopédie* (XVII, 802), M. Collot, Minister of War, proposed that all invalidated soldiers with pensions be encouraged to marry and propagate, to the advantage of the state, by an allowance of two sous per day per child, the male offspring to be enrolled later in the armed forces. This policy, Collot said, would offset the great losses occasioned by war. Under Louis XIV and in the eighteenth century efforts were made to induce returned soldiers to marry, apparently with little success (see Villeneuve, below, *Discours*, pp. 31, 45-46, 52-56).

⁸⁴ *Discours d'un bon citoyen sur les moyens de multiplier les forces de l'Etat, & d'augmenter la population* (Paris, 1760); *L'ami des pauvres, ou l'économie politique* (Paris, 1766). He advocated the suppression of holidays in *Mémoire de discipline et de politique sur la suppression des fêtes, et sur d'autres arangmens relatifs a ces deux objets*, n.d., bound with *L'ami des pauvres* (Paris, 1766).

⁸⁵ *L'ami*, pp. 2-3. He remarked that never before had there been interest in so many countries in the subject of population growth (*ibid.*, p. 2).

In his *Discours d'un bon citoyen* Villeneuve criticized the prevailing occupational distribution, and the current method of recruiting the militia, which intensified occupational maldistribution. The power of a state, he said, depends as much upon the manner in which men are employed as upon their number.⁸⁶ Of idle and sterile religious celibates, of governmental officials, and of persons engaged in satisfying "accidental desires" and "needs of opinion" there were too many, and of agriculturalists there were too few.⁸⁷ Meanwhile, agriculture, the "primary source of true wealth," was languishing; for the children of cultivators were abandoning agriculture for urban trades and domestic service, often to fall prey to vice and evil; physically able cultivators were being attracted by urban employment or drawn off into military service; and the conduct of agriculture, already cramped by a lack of hands, was gradually falling into the hands of misfits and persons sapped by poverty—of individuals unfit for military service or urban employment.⁸⁸ Chiefly responsible for the drift out of agriculture was the practice of recruiting the militia in rural areas, and of exempting from military service many useless or unimportant groups; for the calling of new levies continually disrupted agriculture, while fear of service led many cultivators and their sons to quit rural areas; and few who went off to war ever returned to the farm.⁸⁹ Villeneuve proposed, as correctives for the situation outlined, special penalties for celibates, bonuses and privileges for parents, the removal of impediments to marriage, and the subjection of all the lower classes (and not only agriculturalists) to militia service.⁹⁰

In his *L'ami des pauvres* Villeneuve outlined two sets of pro-

⁸⁶ *Discours*, pp. 146-47.

⁸⁷ *Ibid.*, pp. 147-61. He estimated the number of personal servants at two millions; that of religious celibates at a quarter million (*ibid.*, pp. 148-49, 184).

⁸⁸ *Ibid.*, pp. 161-68. In the course of his discussion he gives evidence of subscribing to a subsistence theory of wages. Rural emigration, he said, served to push up wages and injure commerce; for as the rural population decreased, provisions became less plentiful and wages rose, the price of labor being "constantly ruled by that of goods necessary to life" (*ibid.*, p. 167).

⁸⁹ *Ibid.*, pp. 45-46, 118-36, 170-77, 185-86. In the past many had deserted the army and gone to foreign lands (*ibid.*, pp. 33-36).

⁹⁰ *Ibid.*, pp. 188-95. He also approved (*ibid.*, pp. 137-39) Forbonnais' proposal (*Considérations sur les finances*, I, 300) that each parish be permitted to raise money and hire the number of recruits demanded of it.

posals, one designed to enrich the common people and thereby to stimulate their increase, and the other intended to improve the biological quality of the French population. Believing that individuals acquire wealth and security in virtue of their ability to do useful work, to live economically, and to save, he urged that all children, particularly the children of workers and lower bourgeoisie, be taught and occupied at useful trades, and accustomed to live economically; and that domestics and others, who commonly lacked the courage and foresight to save and build up security against the future and old age, be compelled to do so. He advocated, as a means of facilitating the achievement of individual security, a plan slightly similar to that proposed earlier by Boulainvilliers: that domestics and members of similar occupations be compelled to turn over (say) three fifths of their wages to a perpetual governmental administrative body, or to companies supervised by the government, said body or companies to invest these cumulated small sums in worthy enterprises and pay to each saver at the end of a designated time period such *rentes* or annuity as his cumulated contributions permitted at the effective interest levels. Given reform along the lines indicated, several desirable ends would be attained: (1) children would cease, at an early age, to be an expense to parents; (2) wasteful expenditures on wine, tobacco, and other superfluities would be greatly reduced; (3) domestics and others often would find themselves able at an early age to quit domestic service and go into business for themselves; (4) commoners could escape poverty and misery, acquire means on which to educate their children, and live happily in the thought of security in old age; (5) the funds accumulated would permit the financing of many useful projects and enterprises; (6) while marriages would be facilitated, they would not tend to occur until workers were financially comfortable and physically mature.⁹¹

Believing that it was even more necessary to perfect than to augment the French people, inasmuch as they had been enfeebled and disfigured by centuries of dysgenic selection, Villeneuve suggested various measures for the improvement of the health and

⁹¹ *L'ami*, esp. pp. 3-14, 23-28, 46, 50-68, 70-72, 79-80, 108.

quality of the population:⁹² (1) enrolling the unfit (e.g., cripples, the one-eyed) in special military regiments, or in religious institutions, and thereby preventing their propagation; (2) restricting employment as domestic servants to males and females unfit to marry;⁹³ (3) reserving strength-requiring occupations for the sturdy, and nonfatiguing jobs for the aged and feeble; (4) exempting agriculturalists from militia service and *corvées*, and employing prisoners to man the mines and quarries and build the roads; (5) requiring the wealthy to curtail expenditures on superfluities and invest the resultant savings in the construction of roads and canals and the clearing of lands. He proposed additional measures for the fostering of marriage, propagation, and child-rearing on part of the fit: (1) fixing the minimum marriageable age at 20 years for females, and 25 for males; (2) abolition of all church and ceremonial expenses which increased the cost of marriage; (3) reduction of taxes incident on parents, and elevation of taxes incident on celibates, and on nonessentials; (4) making the acquisition of *maitrisés* gratuitous or inexpensive to married persons, and expensive or nonavailable to celibates; (5) prevention of overcrowding in the liberal professions, so that professional persons would no longer refrain from marriage and propagation for fear that their children would be unable to find employment in the liberal professions; (6) mobilization of public employment and public funds in such wise as to stimulate marriage of the fit and facilitate the education of their offspring; (7) requiring the members of religious orders to medicate and educate the common population free of charge. Given such a program, Villeneuve believed, emigration would cease, libertinage would disappear, and a sufficiency of robust children would be procreated.⁹⁴

⁹² *L'ami*, pp. 115-19, 122.

⁹³ He also recommended the use of a graduated tax to limit the number of domestics, lackeys, governesses, and chambermaids.

⁹⁴ *Ibid.*, pp. 118-52, 169-71. Villeneuve was influenced by M. de Vandermonde's *Essai sur les moyens de perfectionner l'espèce humaine* (Paris, 1756) and approved the latter's advice that new-born children be nourished when necessary upon the milk of animals (*L'ami*, pp. 132-33). Villeneuve was enthusiastic over the quasi-communistic community as a means of alleviating individual poverty and presumably favoring population growth. See his "Moraves," *Encyclopédie*, X (1765), 704-06, reprinted in the *Encyclopédie méthodique (Histoire, III)*, C, 630-34. This article inspired several similar articles, says Lichtenberger (*op. cit.*, pp. 337-44).

VII

Of the eighteenth-century French writers on population none was more competent and judicious than M. Moheau.⁹⁵ He was a populationist in that he believed the fiscal, military, political, and economic resources and power of the state to be proportionate to its population. Man was the creator of "wealth"; moreover, his efficiency and capacity for progress tended to be greater when his numbers were "assembled"⁹⁶ (i.e., more dense).⁹⁷ Although Moheau appears to have subscribed to the eighteenth-century humanitarian values, and to have recognized that the population capacity of a region is limited,⁹⁸ he developed no theory of an optimum population. He merely qualified his proposition that population growth was desirable by insisting that a population, to be of maximum usefulness to the state, must consist primarily of cultivators and peasants, of members of useful nonagricultural occupations, and of soldiers and potential soldiers.⁹⁹

Moheau admitted that population growth was conditioned by the supply of subsistence, but denied that it was thereby determined. Most of the physical checks¹⁰⁰ to the population growth,

⁹⁵ *Recherches et considérations sur la population de la France* (Paris, 1778). Part I of this work, which was inspired by Messance's earlier study and which embodied some of Messance's statistical data, is a statistical description of the population of France; Part II deals primarily with the factors that influence population growth. For a complete account of Moheau's work see my "Moheau: Prophet of Depopulation," *J. P. E.*, XLVII (1939), 648-677.

⁹⁶ Cp. with the similar opinion of the Abbé de Saint-Pierre, Chapter VI, below. Neither the Abbé nor Moheau explicitly demonstrated, however, that population growth on a given area would (at least within limits) facilitate specialization and interindividual stimulation and thus tend to increase per capita output and income.

⁹⁷ *Recherches*, I, 4-5, 12-18. Although Moheau advocated the use of mercenaries when feasible (*ibid.*, II, 123-24), he rejected the view that a nation's military power derived chiefly from its financial and economic resources, rather than from its man power. This view, while valid for sea power, he held, was not generally valid in respect to land power in a country situated as was France (*ibid.*, I, 17; II, 123-24).

⁹⁸ A square league can support 850 persons, he said in one place (*ibid.*, II, 137), following Vauban. Moheau noted that level of density was higher than 850, however, when employment was obtainable (II, 137-38), ranging from a high level along the sea coast and riverbanks through medium levels in vine and grain-producing areas to low levels in grazing and forest regions (*ibid.*, I, 20-21, 66-69).

⁹⁹ *Ibid.*, I, 17, 111-15. It was preferable, too, since married persons reproduced and were attached to their natal soil, that the bulk of the population be married (*ibid.*, I, 79-81).

¹⁰⁰ In the category of physical checks he placed all factors which exercised an unfavorable influence upon health and length of life: climate, temperature, humidity, con-

and all the political, civil, and moral checks, were independent of the supply of subsistence. In general, he believed that population tended to grow most rapidly where the bulk of the population enjoyed simple comfort, not where men were poverty-stricken, or where they were opulent and addicted to luxury.¹⁰¹ Specifically, he said that men tended to marry and multiply most, and infant mortality tended to be lowest, where men could easily obtain "through ownership of the soil or through labor" the "things necessary to life."¹⁰² Accordingly, he emphasized, though in a lesser measure than Cantillon, the role of proprietors and employers in respect to population growth. For not only did proprietors determine in large measure whether or not land and other resources were used to add to the fund of subsistence; they also governed, through their market demands, the volume of employment available to the landless laboring class and the extent to which men and women were compelled to pursue occupations that were conducive to ill health, or that required them to remain celibate.¹⁰³ The demand for labor tended to be sufficient to provide employment for everyone only so long as nearly everyone owned land; otherwise governmental intervention tended to be necessary to insure full employment.¹⁰⁴

In consistence with the preceding argument Moheau rejected the proposition that the population of France had been increasing very slowly, if at all. Like Messance, he presented statistical data revealing an increase in the absolute number of births and therefore in the nation's population, a continual excess of births over deaths, and population growth in enumerated areas.¹⁰⁵ He

dition of the atmosphere, dietetic habits, mode of living, occupational pursuits, and the like (*ibid.*, II, 6-44).

¹⁰¹ In regions in which men were poor and underfed, reproductive capacity fell below normal; and many found themselves compelled to emigrate or perish because of inadequacies in the supply and quality of food (*ibid.*, II, 135-36). Where the mode of existence was luxurious and the tempo of life fast, men and women tended to be enfeebled. Moreover, where many female domestics were employed there was much libertinage and, in consequence, much venereal disease (*ibid.*, II, 108-12).

¹⁰² "The true measure of the population appears to us to consist less in the quantity of subsistence, than in the greater or lesser facility with which it can be procured" (*ibid.*, II, 137-38).

¹⁰³ *Ibid.*, II, 106-07, 116-20, 135-43.

¹⁰⁴ *Ibid.*, II, 138-39. Moheau recognized that some regions and some countries exchanged fabricated products for subsistence, but he did not indicate whether he believed that commerce could augment a nation's subsistence or net amount of employment (*ibid.*, II, 127, 137-39).

¹⁰⁵ *Ibid.*, I, 32-56, 64-65, 276-80.

argued too that since the food supply was greater and more stable than formerly, and misery was less widespread, and the various checks to population growth were less effective on the whole than they had been, it was certain that numbers had grown and were growing.¹⁰⁶

Moheau emphasized the cultural and nonbiological character of many of the principal determinants of population growth. Most important was the state of the *mœurs* on which depended both the frequency of marriage and fertility within marriage. Men were impelled to procreate by their feeling of sentimental attachment for children, not by economic self-interest; for children added less to the parental income than their reproduction and rearing cost.¹⁰⁷ When the *mœurs* no longer re-enforced the "sentiments," depopulation was likely. In France, in consequence of the development of "the spirit of calculation," of frivolity, of love of luxury, and of wants in excess of income,¹⁰⁸ women not only refused to suckle their children, but also regarded "propagation of the species as a dupery of olden times; . . . they cheat nature even in the villages." Unless the *mœurs* were restored, Moheau predicted, depopulation would develop.¹⁰⁹ It was essential to the continuation of population growth, therefore, that prostitution and libertinage be suppressed, that extramarital sexual relations be made impossible, that economic inequality be reduced, and that the tax system be made to favor population growth.¹¹⁰

Moheau appraised most of the then alleged causes of depopulation. He described Catholicism as favorable to population growth because of the values which it inculcated and because of

¹⁰⁶ *Ibid.*, I, 249-67, 271-72, 275. While he admitted that the method of recruiting armies tended to produce dysgenic selection in a state, and that the nobility had degenerated physically, he denied that there existed evidence of physical degeneration in the non-noble population. He noted, moreover, that the tendency of females to prefer attractive males in marriage was favorable to eugenic selection (*ibid.*, II, 120-27).

¹⁰⁷ *Ibid.*, II, 98-99.

¹⁰⁸ Such tastes and desires were a natural concomitant of inequality, for many, regardless of their incomes, tended to acquire the tastes of those with higher incomes (*ibid.*, II, 105).

¹⁰⁹ *Ibid.*, II, 99-103.

¹¹⁰ *Ibid.*, II, 99-101, 105, 116-20. Were libertinage and debauchery suppressed, venereal disease would diminish, natural fecundity would increase, and relatively fewer sickly children would be born (*ibid.*, II, 104).

its insistence that cohabitation was a duty whose end was generation.¹¹¹ He denied that the establishment of the right to divorce would augment natural increase, saying that on the whole it would tend to weaken marital and family ties. He recommended that the age at which males and females could marry be advanced from 14 and 12 to 18 and 16; and that males and females be permitted to marry without parental consent upon reaching the ages of 25 and 21, respectively.¹¹² He condemned primogeniture as unfavorable to marriage on part of younger children and advocated inheritance laws conducing to greater economic equality.¹¹³ Declaring war to be as great a check to population growth as famine and pestilence, he urged the adoption of a policy of peace. He recommended that soldiers be allowed and aided to marry, and that, for eugenic reasons, the physically less able be used for military purposes in so far as possible.¹¹⁴ He proposed that since great cities were foyers of "vices destructive to population," and since rural areas were more favorable to population growth, taxation be employed to check urban growth and the proceeds be used for the benefit of rural areas.¹¹⁵ He claimed finally that if the citizen's liberty, property, security, and right to pursue a livelihood of his own choosing were protected by the state, and laws of the realm were administered justly under a monarchical form of government, the tendency to multiply would be favored.¹¹⁶

Moheau suggested additional means whereby population growth might be favored. These means included a reduction of taxes incident upon necessities; the use of regulatory devices and heavy taxes for the curtailment of "harmful" occupations and of the consumption of luxuries;¹¹⁷ limitations on the sale of *rentes*

¹¹¹ *Ibid.*, II, 47-55. Moheau, however, condemned the Revocation of the Edict of Nantes and religious fanaticism in general. He considered religious celibacy an unimportant check, inasmuch as the number of religious celibates was so small (i.e., 130,000) (*ibid.*, I, 100-02).

¹¹² *Ibid.*, II, 67-81.

¹¹³ *Ibid.*, II, 92-94.

¹¹⁴ *Ibid.*, II, 120-27.

¹¹⁵ *Ibid.*, II, 150-51; also I, 42, 50, 82, 144, 242. He stated that while in general "the nobility do not people," the rural nobility, who were economically better off than the commoners and who had an intense desire to transmit the family name, were more fertile even than the common people (*ibid.*, I, 106-07).

¹¹⁶ *Ibid.*, II, 56-65.

¹¹⁷ He advocated the taxation of imported luxuries, of products whose creation en-

viagères;¹¹⁸ the introduction and enforcement of sanitary measures suited to improve the general health and reduce mortality;¹¹⁹ and the establishment in France of economic and social conditions sufficiently favorable to attract immigrants and to dissipate the desire of natives to emigrate.¹²⁰

It was necessary, finally, if the "physical, moral, and political order" were to be made "most advantageous to the propagation and to the conservation of the human species,"¹²¹ that marriage and procreation be fostered by measures simple, easy to understand, and adapted to the prevailing situation.¹²² Moheau therefore suggested appropriate modifications in the distribution of the tax and other burdens: (1) reduction of the tax, militia, and similar burdens incident upon the married, and augmentation of corresponding burdens incident upon celibates; (2) reduction of the rights of inheritance enjoyed by celibate heirs; (3) imposition of a progressive tax upon employers of unmarried domestics;¹²³ (4) additional tax exemptions for persons who married and produced three or more children.¹²⁴ These measures, he believed, would be effective, for the benefits were within easy reach of all classes and the burdens were inescapable.

dangered the health of workers, and of luxuries whose production diverted resources from the raising of subsistence. He proposed that dangerous trades be curbed, and that occupations suitable for women be reserved for them so that they could avoid both prostitution and occupations which made the procreation and rearing of children difficult or impossible (*ibid.*, II, 38-41, 116-20, 140-43).

¹¹⁸ He suggested that if their sale could not be discontinued, the denominations be made so large that only a few could purchase *rentes*; for then there would be few *rentiers* to be diverted from marriage by the prospect of living idly on an assured but small fixed income (*ibid.*, II, 86-87).

¹¹⁹ *Ibid.*, II, 117-18, 144-56.

¹²⁰ *Ibid.*, II, 113-15, 129-34. He looked upon expatriation as a "national malady" which carried out of France or destroyed 25,000 persons, mostly adults, each year. Of the many who went to the colonies, two fifths succumbed to the uncongenial colonial climates (*ibid.*, I, 243-47; II, 127-29). He did not look with favor upon colonial expansion, therefore, believing it unnecessary and demographically disadvantageous to France. At the same time he stated that coercive anti-emigration laws would not prove effective if living conditions in France remained unattractive.

¹²¹ *Ibid.*, II, 156-57.

¹²² Colbert's measures had offered no incentive to potential parents. Measures against religious celibacy were not to be sanctioned, since on the balance Catholicism was favorable to population growth. Measures to exclude celibates from certain occupations tended to deprive the community of the services of the excluded celibates. While it was desirable that the married be accorded certain favors, not much was to be expected from such favoritism (*ibid.*, II, 85-88).

¹²³ *Ibid.*, I, 113-15; II, 89-90.

¹²⁴ *Ibid.*, II, 89-90.

VIII

A number of writers in the last quarter of the eighteenth century continued to advocate the enactment of pro-populationist measures, despite the increasingly common belief that France was not suffering and was not likely to suffer depopulation. J. F. Dumas (?-1795) recommended that the number of priests, monks, and nuns not exceed that necessary to meet the actual religious needs of the nation.¹²⁵ He proposed reducing mendicity through confiscation of the property of religious institutions and use of this property to provide for illegitimate children and for needy persons who were members of large families, or otherwise worthy; by training the children of the poor for employment in industry; and by providing jobs for able-bodied unemployed persons.¹²⁶

Celibacy, both lay and ecclesiastical, continued to be attacked throughout the eighteenth century. As early as 1713 it had been ridiculed by Morin in a *Mémoire sur le célibat*, read before the Académie des Inscriptions.¹²⁷ In 1765 the Abbé Pichon proposed imposing a progressive income tax upon all male celibates aged 30-60 and all female celibates aged 20-50.¹²⁸ Dufriche de Valazé proposed doubling the tax rate incident upon celibates and reducing that on heads of families.¹²⁹ In 1783 M. Henry advocated that celibates be required to pay tax rates four to eight times those incident upon heads of families, to compensate for their failure to raise children for the state.¹³⁰ During the years immediately following the French Revolution several proposals were made for increasing the military and tax burdens of celibates, and measures incorporating this principle were put into effect.¹³¹

¹²⁵ *L'esprit du citoyen* (Neuchâtel, 1783), p. xi. He attributed voluntary and involuntary infertility and the deferment of marriage to libertinage (*ibid.*, pp. 60-61, 73-74).

¹²⁶ *Ibid.*, Part IV, esp. pp. 280-81, 312-13, 322-26. He advocated excluding from France all foreigners who could not prove that they had resources and that they were not likely to become public charges (*ibid.*, p. 306).

¹²⁷ Cited by Schöne, *Histoire de la population française*, pp. 277-78.

¹²⁸ *Mémoire sur les abus du célibat et sur le moyen possible de les réprimer*. In 1704 Begon, intendant at La Rochelle, had proposed a proportional tax upon the income of lay celibates, males over 25, and females over 20 (Schöne, *op. cit.*, pp. 205-06).

¹²⁹ *Traité des lois pénales* (Alençon, 1784), p. 207, cited by Schöne, *op. cit.*, p. 296.

¹³⁰ "Célibat," *Encyclopédie méthodique*, CXXXVIII (Paris, 1783), 352.

¹³¹ Schöne, *op. cit.*, pp. 222-39.

Celibacy was vigorously attacked in a work written at the close of the century by Poncet de la Grave, who repeated many of the arguments already mentioned.¹³² Every nation, he said, had condemned celibacy and infertility. No maxim was "more generally received" than that a state could become rich and powerful only if it had a great population. Yet "religion, celibacy, luxury, particular societies, libertinage, depravation of the *mœurs*, [and] perpetual *rentes* and annuities" had brought about a "sensible diminution" of the population.¹³³ The Revolution had reduced, but had not destroyed, religious celibacy.¹³⁴ Other obstacles to population growth remained; wherefore it was necessary that the government enact measures favorable to marriage and population growth.

He enumerated a number of checks to population growth. Mohammedanism was unfavorable to population growth because it sanctioned polygamy, which deprived many males of mates and many females of sufficiently frequent sexual relations.¹³⁵ Christianity was equally unfavorable to multiplication, for its principal object was "to people heaven." Christianity approved celibacy, proscribed divorce even when one party was sterile, counseled asceticism even within the married state, and frowned upon all sentiments favorable to sexual relations and propagation.¹³⁶ Debauchery and prostitution spread venereal disease among adults and their children, led to sexual excesses which often resulted in sterility, caused many not to marry,¹³⁷ brought the married state itself into disesteem,¹³⁸ and destroyed the sexual attachment between husband and wife.¹³⁹ Luxury was inimical

¹³² *Considérations sur le célibat relativement à la politique, à la population, et aux bonnes mœurs* (Paris, 1801).

¹³³ *Ibid.*, pp. 1-10, 17-18.

¹³⁴ *Ibid.*, pp. 11, 22. He estimated (*ibid.*, p. 11) at 500,000 the number of religious celibates at the outbreak of the Revolution. Robert estimated the number at two per cent of the population. The most frequently repeated estimate was "nearly 500,000." Villeneuve Bargemont later fixed the number at 418,000 (Schöne, *op. cit.*, pp. 204-05). Moheau, Taine, Mathorez, and others have fixed the number at a much lower level.

¹³⁵ *Considérations*, pp. 18-19.

¹³⁶ *Ibid.*, pp. 19-22, 121-22.

¹³⁷ *Ibid.*, pp. 24, 35-39. He estimated at over 100,000 the number of French prostitutes, and at several times this number the males who did not marry (*ibid.*, pp. 35-36) because they were served by these prostitutes.

¹³⁸ *Ibid.*, pp. 68-70. Celibates are described as corrupters of the *mœurs* and the natural enemies of population and government (*ibid.*, pp. 67-81).

¹³⁹ Wives, finding themselves neglected by their husbands, "sacrifice everything for the conservation of their beauty" and, fearing that it will be marred by childbearing,

to population growth in several respects. Luxury caused ruralists to abandon agriculture and enter domestic service and other occupations that prevented their marriage;¹⁴⁰ it also operated in indirect ways to prevent marriage and propagation and to render the population weak and less fit for military service.¹⁴¹ Love of luxury—i.e., the desire for superfluities and comfort—caused men either to defer marriage for a long time, or to avoid marriage, and thus prevented the birth of many children.¹⁴² The married also hesitated to raise children because under the new law fixing twenty-one years as the age of majority parents feared that children would no longer exhibit filial piety.¹⁴³

De la Grave, in his discussion of means whereby population growth might be stimulated, rejected Colbert's measures, saying that the state could not afford many such pensions, and that pensions which fell far short of compensating parents would prove ineffective. To be effective, a measure needed to appeal to the interests of the individual. Accordingly, he proposed that parents be rewarded with distinctions and preferences as to employment, for such rewards corresponded to the requirements of "the French spirit" and cost the state little.¹⁴⁴ That the individual was under obligation to procreate for the state he virtually took for granted. "Each citizen is a portion of the general population; as a member of the republic, he is obliged to work for its duration, and to furnish . . . [his] portion of its perpetuity."¹⁴⁵

He proposed the enactment of two decrees, one designed to reward the fecund; the other, to penalize the celibate. Let the population be divided into five classes, the first to include parents with ten or more children; the second, those with six or more; the third, those with four or more; the fourth, those with no children; the fifth, celibates of both sexes, aged twenty-one or more years. Let the members of each class wear a distinguishing

"remain celibate" even in marriage. In these circumstances, even if an heir is born, he is not robust; moreover, as he is usually placed with a mercenary wet nurse, his chances of survival are not good (*ibid.*, pp. 77, 79-80).

¹⁴⁰ *Ibid.*, pp. 31-33, 118.

¹⁴¹ *Ibid.*, pp. 29-31.

¹⁴² *Ibid.*, pp. 26-27, 115-20. Under the monarchy over one hundred thousand citizens, he said, had bought annuities; most of them had remained celibate, preferring luxury to provision for posterity (*ibid.*, p. 121).

¹⁴³ *Ibid.*, p. 74.

¹⁴⁴ *Ibid.*, pp. 128-31.

¹⁴⁵ *Ibid.*, p. 116.

insignia at all public assemblies and there be accorded a position in keeping with this rank. Let the members of the first class be hailed "Honneur aux premiers citoyens," and let the members of the fifth class, who would be under compulsion to attend such assemblies, be addressed, "Retirez vous, comme indignes d'être membres de la société," and then excluded from the assemblage. Let the members of the first three classes be granted tax exemptions according to rank. Finally, let the names of the members of the first class be inscribed in gold on a scroll placed in a conspicuous public place, recorded in the governmental archives, and published in all the journals. Families with one to three children are not mentioned.

By the decree, proposed by De la Grave to disadvantage celibates aged twenty-five or more years, the latter were declared "incapable of possessing or filling any place or situation whatever in the entire extent of the Republic," at least until they had reached the age of seventy. (Apparently he referred here only to public employment.) Their taxes were doubled, and income from their annuities was halved, so long as they were under seventy. They were denied the right to inherit or to bequeath property and notaries were made responsible for the observance of this provision. They were required to wear a distinguishing insignia, and were declared not admissible to public assemblies. In each of a number of designated districts an appointed censor of the *mœurs* would enforce the above regulations. Employers of celibate males over 20 and of celibate females over 17 were required to pay a tax for each celibate employed. Celibate males and females who later desired to marry were forbidden to marry mates respectively over forty and sixty years of age. Such money as celibates paid or lost to the state in consequence of the financial burdens imposed upon them was to become the property of the state for the most part.¹⁴⁶

Even after Malthus' work must have become known in France, celibacy continued to be condemned. In 1802 M. Robert proposed that celibates be compelled to wear derisive costumes,

¹⁴⁶ *Ibid.*, pp. 132-41. These regulations were also to apply to persons who in the future became religious celibates, but not to those already priests or religious.

and that all soldiers marry.¹⁴⁷ In 1808 a system of taxation was proposed by J. B. R. de Montyon (1733-1820) as a means of suppressing celibacy, employment of celibates as domestics, and use of land for the satisfaction of luxurious tastes.¹⁴⁸ Not until Malthus' doctrine came to be generally accepted in France after the Napoleonic wars did the criticism of celibacy as a check to population die down, only to be revived in the second half of the nineteenth century when alarm over the slowness of population growth again began to develop.

Comparison of the opinions and reasoning of the writers whose works have been discussed in this chapter reveals a striking similarity. All took the advantages of population growth and of a fairly large population for granted, even Moheau making only a desultory inquiry into the fundamental character of these advantages. Conspicuous in the opinions of these writers, in contrast with those of pre-eighteenth-century mercantilists, is the lack of emphasis upon (and at times opposition to) external colonization, the absence of stress upon the supposed military advantages of a large population, and the greater importance attached to humanitarian values and (in some cases) to a simple, if not Spartan, way of life; in the writings of both groups, however, the need to keep everyone employed is reiterated. Although most of the writers treated in this chapter supposed that population growth is conditioned by the availability of subsistence and employment, they devoted attention chiefly to institutional and moral checks—celibacy and decadent *mœurs*, and circumstances giving rise thereto—and to the elaboration of reforms whereby these checks might be eliminated or made less effective. In sum, contrast of the opinions here summarized with those prevalent in the seventeenth century suggests the presence of a new Weltanschauung, just as contrast of these opinions with those of early nineteenth-century French classical economists (e.g., J. Garnier), or even with those of the physiocrats, reveals a substantially different doctrinal approach.

¹⁴⁷ *De l'influence de la Révolution sur la population* (Paris, 1802), I, 39, 79; cited by Schöne, *op. cit.*, pp. 236-37.

¹⁴⁸ *Quelle influence ont les diverses espèces d'impôts sur la moralité, l'activité et l'industrie des peuples* (Paris, 1808), chap. i. M. de Montyon is accredited by some with being a co-author of Moheau's *Recherches* (see above).

CHAPTER IV

CANTILLON AND THE THEORY OF LUXURY

THE ANALYSIS of the causes and effects of luxury consumption and production was not immediately integrated with population theory. In the sixteenth century and earlier the consumption of luxuries was variously condemned because it was sinful, enabled the rising bourgeoisie to emulate the nobility, led the nobility to waste their patrimony, and caused precious metals either to be embodied in luxury goods or to flow out of the country.¹ Even those who advocated the establishment of luxury industries were not always proponents of luxury consumption as such. Montchrétien, for example, realized that industrial expansion was not consistent with the simple life that he favored.² Laffemas looked upon luxury production as a means of providing employment and establishing a favorable balance of trade.³ In the seventeenth century luxury production, which was frequently confused with manufacturing in general, was viewed by some as favorable to the expansion of employment and therefore to the augmentation and utilization of the population.⁴ Others described luxury manufactures as favorable to urbanization and unfavorable to agriculture. The critics of luxury consumption condemned it on moral, religious, class, and bullionist grounds, and described it as wasteful and as conducive to national decay.⁵

¹ C. W. Cole, *French Mercantilistic Doctrines Before Colbert*, pp. 12-13, 61-62.

² De Montchrétien, *op. cit.*, p. 21.

³ Cole, *op. cit.*, pp. 81-91.

⁴ Those who accepted the preconceptions of the mercantilists and bullionists favored the encouragement of manufacturing, whether of luxuries or of other products, for reasons given in Chapters I-II; at the same time they often recommended curtailment of domestic consumption of domestically produced luxuries, both because such consumption might injure the *mœurs* and because the net influx of bullion would be greater if all the domestically produced luxuries were marketed abroad (A. Deschamps, *R. H. S.*, VIII, 1920, 27-30; also E. Depitre's account of the suppression in France of the calico trade, *ibid.*, IV, 1911, esp. pp. 369-73; Cole, *Colbert*, I, 5-19, 100-02; II, 543-48).

⁵ "The partisans of *luxe*," wrote Jean du Pradel in 1705, argue that man's penchant to change his mode of life renders luxury necessary; that what is luxury, eventually comes to be necessity; that for reasons of state luxury is good and necessary; that luxury attracts foreign wealth and "enables to subsist a great number of subjects, who without that would be idle and useless." These arguments Du Pradel, who extolled "frugality"

Throughout the eighteenth century luxury, variously defined, was discussed at length by political and economic writers; for the introduction, through the discoveries and inventions, of new goods and products, together with the development of new social doctrines, thrust the broad problem of luxury production and consumption to the fore. Some of these writers related their treatments of luxury to their discussions of population growth.

Critics of luxury usually asserted, among other things, that luxury consumption was unfavorable to population growth. Many pointed to luxurious consumption as the principal cause of lay celibacy and of the restriction of family size. Some opposed the consumption of foreign luxuries on the ground that such consumption tended to carry out bullion or to restrict the amount of employment available within France, with the result that the population capacity of the country was reduced. Others identified luxury with its alleged chief causes, marked economic inequality and heavy but unproductive governmental expenditures, and attributed to luxury the exploitation and consequent misery of the masses, and the resulting retardation of population growth. Some merely condemned such luxurious consumption as did not augment the demand for agricultural products. Some, finally, dwelt upon the fact that various forms of luxurious consumption diverted the resources of the nation from the creation of subsistence.

The defenders of luxury, of whom there was a growing number, simply argued either that luxury consumption was favorable to employment and population growth, or that it was an inherent part of life in human societies, or that the improvement of man's mundane lot was at least as important as the swelling of his numbers. Many (e.g., Melon, Voltaire, Montesquieu) adopted some of the relatively new theses of Mandeville: that man is governed by his passions, not by his reason; that man is egoistic and cannot help doing what he deems advantageous to himself; that pride and the desire to emulate dominate man; that national

and "modesty" and who held *luxe* to be an impoverisher of families, rejected as invalid. He observed, too, that each class of society in France was ambitious to live according to the standards of the social class just above it. See his *Traité contre le luxe des hommes et des femmes, et contre le luxe avec lequel on élève les enfans de l'un & de l'autre sexe* (Paris, 1705), Preface, also p. 5.

frugality is a vice, not a virtue, prodigality serving, among other things, to redistribute wealth and subsist the population; that luxury inevitably develops in great states, and is prerequisite thereto; that individual pursuit of self-interest normally redounds to the benefit of the state.⁶ The doctrine that man is egoistic and governed by his passions rather than by his reason, along with the proposition that luxury is inevitable in a flourishing state, served to make men accept luxury as part of the scheme of things. The view that man is impelled, by his pride and his desire to emulate others, to work hard and effectively, enabled the defenders of luxury to convert it into an independently productive force. The defenders of luxury, therefore, argued not only that luxurious consumption favored population growth by redistributing wealth, but that the natural desire of men for luxury induced them to work harder, energized their ingenuity, and multiplied employments, thus augmenting the population capacity of a country and stimulating its demographic growth. Some, accepting the growing view that happiness was at least one objective of mundane efforts, and believing that happiness was associated with a multiplicity of agreeable sensations, defended the right to produce and consume freely on almost purely hedonistic grounds.⁷

⁶ F. B. Kaye (ed.), *The Fable of the Bees*, by Bernard Mandeville (Oxford, 1924). Published as a pamphlet in 1705, it appeared as a book in 1714, and thereafter went through a number of editions. Although French translations did not appear until 1740 and 1750, Mandeville's views were understood by Voltaire, were discussed a number of times in France, and were well known there. See Kaye, *op. cit.*, I, Introduction, Parts II and V; also II, 418-53, for list of works in which Mandeville is cited. For a list of French writings on luxury after 1736, see A. Morize, *Apologie du luxe au XVIII^e siècle* (Paris, 1909), pp. 177-89; for the influence of Mandeville in France, see *ibid.*, pp. 57-61, 72-86, 108-13. Kaye summarizes Mandeville's doctrine in *op. cit.*, I, xxxviii-lxvi. Mandeville was much influenced by Peter Bayle (1647-1706), Saint-Evremond (1613-1703), and La Rochefoucauld, and was somewhat indebted to Montaigne, Pascal, and Fontenelle. Bayle had emphasized the importance of passions, pride, and egoism; he had said, as had Saint-Evremond, that prodigality redistributes wealth and enables the common people to subsist. Saint-Evremond, an epicurean, had urged the necessity and importance of luxury to the state. Rochefoucauld had observed that virtues are often disguised vices. Boisguillebert had anticipated Mandeville's defense of laissez faire (Kaye, I, Introduction, Part IV; Morize, *op. cit.*, pp. 35-37, 64-67, 69-72).

⁷ In his *Les mœurs* (Amsterdam, 1748), F. V. Toussaint said that passions "are not bad in themselves, but . . . are good, useful, & necessary"; that the "needs of life" and passions are the source of progress; and that "moderate" and even sensual pleasures are "necessary" to man and are compatible "with the highest virtue" (*ibid.*, pp. 85, 95, 148). For publishing this work Toussaint had to go into exile.

I

Inasmuch as luxury was discussed by so many French writers on population, the views held by many of them on luxury have been discussed along with their other notions. In this chapter the doctrines of Richard Cantillon and his followers and the opinions of a number of French writers who wrote principally against or in defense of luxury will be examined.

Richard Cantillon is important in the history of French population theory for two reasons. First, despite Quesnay's hostility to his views, Cantillon was a forerunner of the physiocrats in that he looked upon land as the material source of wealth, and influenced, directly or indirectly, at least four writers (Mirabeau, Condillac, Peuchet, and Garnier) who subscribed in part to the views of Quesnay. Second, Cantillon was the first economist in France to analyze the influence exercised by landed proprietors upon both the distribution of income and the growth of population, and the first to demonstrate clearly the manner in which foreign trade and the distribution of wealth and income affect population growth; he also was one of the first to examine the causes and effects of variations in living standards.⁸ Cantillon's disciples included Mirabeau (prior to his conversion to physiocracy), Condillac, Garnier, Peuchet, and in part Pluquet, foremost of the writers on luxury. Du Buat-Nançay shared certain of Cantillon's views, as did Moheau and Goudar.⁹

Cantillon's wage and population theories are in essence corollaries to his presuppositions concerning the class structure of society and the nature of economic production. "Land is the Source . . . whence all Wealth is produced," labor merely serving to give "the form of Wealth" to the products of land and water. Man's ability to obtain subsistence is conditioned, therefore, by

⁸ Cantillon's *Essai sur la nature du commerce en général*, written between 1730 and 1734, was first published in 1755 as a result of Mirabeau's efforts. Mirabeau, who had had a copy of the *Essai* since 1741-42, and had planned to use certain of its contents, caused it to be published when a faulty edition appeared. Mirabeau's ideas are embodied in his *L'ami des hommes*. Quesnay, Condillac, Pluquet, Mably, Morellet, Graslín, and Turgot specifically referred to Cantillon's *Essai*. References below are to the English translation of the *Essai*, by Henry Higgs (London, 1931).

⁹ A. Landry was the first student of the history of economic thought to recognize fully the implications of Cantillon's analysis (Landry, "Une théorie négligée. De l'influence de la direction de la demande sur la productivité du travail, les salaires et la population," *R. d. e. p.*, XXIV, 1910, 314, 364, 747, 773).

the degree of his access, direct or indirect, to land. In so far as the vast majority are concerned, this access is restricted or non-existent; for the "ownership of the Land . . . will necessarily belong to a small number" of a "Society of Men," howsoever it is formed. If the organization of a community is the result of conquest, land is very unequally distributed from the first. If, on the contrary, land originally is evenly distributed, variations in family size, industry, frugality, health, etc., give rise to inequality and to concentration of ownership. Inheritance laws tend to perpetuate, if not also to aggravate, such concentration, whatever its origin.¹⁰

Society thus comprised, according to Cantillon, two principal groups: (1) the landless and substantially propertyless majority who were ultimately dependent, directly or indirectly, for employment and subsistence, upon the landowning minority; (2) the landowning minority who, in virtue of their ownership of land, controlled the actual and potential sources of subsistence and therefore its supply, and who, in consequence, determined the actual and potential demand for the agricultural and non-agricultural labor of the landless. Having so conceived of the class composition of society, Cantillon concluded that the landed proprietors constituted the chief, if not the sole, prime movers in an economy. That he did not consider them the sole prime movers is inferable from his occasional reference to the consuming power of certain individuals (e.g., the Prince, some governmental officials, wealthy nonagricultural undertakers) who, even though they lived ultimately at "the expence of the Proprietors of Land," did not immediately derive all or most of their purchasing power from land. Artisans and undertakers were not prime movers, for although they devoted part of their efforts to the service of each other, their purchasing power and the demand for their services issued ultimately from the "Nobles and Landowners."¹¹

¹⁰ *Ibid.*, pp. 3, 5, 7, 31, 123, 137. Unlike the physiocrats and other defenders of private property, Cantillon pointed out that "most ancient titles" to property were founded not upon labor, etc., but upon "Violence and Conquest" (*ibid.*, p. 31). Cantillon's account of the origin of private property suggests the influence of Hobbes.

¹¹ *Ibid.*, Part I, chaps. ii-vi, xiii. Cantillon attributed the highness of the interest rate to the "great expence" of nobles, landowners, and other rich people, saying that

The Land belongs to the Proprietors, but would be useless to them if it were not cultivated. The more labour is expended on it, other things being equal, the more value they have as Merchandize. Hence the Proprietors have need of the Inhabitants as these have of the Proprietors; but in this oeconomy it is for the Proprietors, who have the disposition and the direction of the Landed capital, to give the most advantageous turn and movement to the whole. Also everything in a State depends on the Fancy, Methods, and Fashions of life of the Proprietors of Land in especial. . . . It may be laid down that except the Prince and the Proprietors of Land, all the Inhabitants of a State are dependent; that they can be divided into two classes, Undertakers and Hired people; and that all the Undertakers are as it were on unfixed wages and the others on wages fixed so long as they receive them though their functions and ranks may be very unequal. . . . Finally all the Inhabitants of a State derive their living and their advantages from the property of the Landowners and are dependent. . . . I will then lay it down as a principle that the Proprietors of Land alone are naturally independent in a State: that all the other Classes are dependent whether Undertakers or hired, and that all the exchange and circulation of the State is conducted by the medium of these Undertakers.¹²

Population growth, Cantillon reasoned in general, was conditioned by the volume of production, by the manner in which it was distributed, and by the living standards of the various categories of the population. In more specific terms, the population of a country depended upon: (1) the total amount of subsistence produced at the behest of, or by, the landed proprietors; (2) the proportion of this amount made available by proprietors for the hire of agricultural and nonagricultural labor; (3) the level of wages and the level of life obtaining in the dependent wage-earning and undertaking classes; (4) the scale of living of the landowning and wealthy classes. These determinants will be considered in order.

While the potential supply of subsistence in a closed economy¹³ depended upon the "Extent of Ground" (the source of

both those who "consume their revenues in advance" and the supplying undertakers had to borrow so that goods could be provided in advance of the receipt of the revenues of land (*ibid.*, p. 215).

¹² *Ibid.*, pp. 47, 55, 57.

¹³ Cantillon does not use this term explicitly; but in his treatment of international

"the Maintenance, Conveniences, and Superfluities of Life"), upon the type of crops raised, and upon the efficiency of cultivation, the actual amount of subsistence produced depended upon the wills of the proprietors and the uses to which they put the land.¹⁴ If the "Prince and the Proprietors of Land" prohibited the cultivation of their estates, "there would be neither Food nor Rayment for any of the Inhabitants."¹⁵ If, on the contrary, the landed proprietors favored population growth, they sought full and effective use of the land and the production of as much subsistence as possible.¹⁶ If, however, the Prince and the Proprietors fancied other ends than the facilitation of population growth, they diverted some land from the maintenance of men to the support of nonagricultural objectives (e.g., gardens, game preserves) or to the production of farm products other than provisions.¹⁷ When the Prince and the Proprietors preferred life in cities, far from their land, analogous diversions of land from agriculture were made, largely through the medium of the pricing system.

If by the prices they offer in the Market for produce and Merchandise [the Prince and the Proprietors of Land] determine the Farmers to employ the Land for other purposes than the Maintenance of Man . . . the People will necessarily diminish in number. Some will be forced to leave the country for lack of employment, others not seeing the neces-

trade he indicates that the supply of subsistence in a closed economy is not always the same as that in an open economy.

¹⁴ *Ibid.*, Part I, chaps. i, xv. The latter chapter is entitled: "The Increase and Decrease of the Number of People in a State chiefly depend on the Taste, the Fashions, and Modes of Living of the Proprietors of Land."

¹⁵ *Ibid.*, pp. 43, 45.

¹⁶ "It is not to be doubted that if all Land were devoted to the simple sustenance of Man the race would increase up to the number that the Land would support. . . . If the Proprietors of Land help to support the Families [of nonproprietors], a single generation suffices to push the increase of Population as far as the produce of the Land will supply means of subsistence. . . . The natural and constant way of increasing Population in a State is to find employment for the People there, and to make the Land serve for the production of their Means of Support" (*ibid.*, pp. 67, 81, 85).

¹⁷ "As for the use to which the Land should be put, the first necessity is to employ part of it for the Maintenance and Food of those who work upon it and make it productive; the rest depends principally upon the Humour and Fashion of Living of the Prince, the Lords, and the Owner: if these are fond of drink, vines must be cultivated; if they are fond of silks, mulberry-trees must be planted and silkworms raised, and moreover part of the Land must be employed to support those needed for these labours; if they delight in horses, pasture is needed, and so on" (*ibid.*, p. 7).

sary means of raising Children, will not marry or will marry late, after having put aside somewhat for the support of the household.¹⁸

In short, population growth depended chiefly upon the behavior of the landed proprietors. For the supply of subsistence depended principally upon their fancies and inclinations; and the supply of subsistence in turn determined the number of people who could be supported, inasmuch as the wage level (as is shown below) tended to remain constant.

It therefore seems pretty clear that the Number of Inhabitants of a State depends on the Means allotted them of obtaining their Support; and as this Means of Subsistence arises from the Method of cultivating the soil, and this Method depends chiefly on the Taste, Humours and Manner of Living of the Proprietors of Land, the Increase and Decrease of Population also stand on the same Foundation.¹⁹

As Landry suggests, since Cantillon argues in substance that the control of landed proprietors over the number of nonproprietors proceeds from their power as consumers, he ought also to argue that artisans and undertakers, in their capacity as consumers, likewise exercise some control over the number of nonproprietors; for the members of the laboring and undertaking classes can in theory demand either more provisions and less of other goods and services, or less provisions and more of other goods and services.²⁰ Cantillon implicitly recognized this corollary but rejected it for two reasons. First, most members of the nonproprietor class "live from day to day and change their mode of living only from necessity" (presumably because they usually earned only a bare living). Second, the "few Farmers, Master Craftsmen or other Undertakers in easy circumstances," who are able to "vary their expense and consumption" always imitate the tastes and modes of the "Lords and Owners of the Land."²¹ He

¹⁸ *Ibid.*, p. 73. If the Proprietors live far from their land "Horses must be fed for the transport into the City both of their food and that of all the Domestic servants, Mechanicks and others whom their residence in the city attracts thither. . . . The more Horses there are in a state the less food will remain for the People. The upkeep of Carriage horses, Hunters, or Chargers, often takes three or four Acres of Land" (*ibid.*, pp. 73, 75).

¹⁹ *Ibid.*, p. 81.

²⁰ *R. d. e. p.*, XXIV, 318-19.

²¹ *Essai*, p. 63, also p. 75. On p. 93 he observes that the landowners imitate the "Prince" and "his Court."

concluded, therefore, that the "Owner, who has at his disposal the third of the Produce of the Land, is the principal Agent in the changes which may occur in demand."²²

This thesis, Cantillon showed, was valid for both a closed and an open economy. The landed proprietors and other wealthy consumers could influence the supply of subsistence through the mechanism of international commerce as well as through that of domestic commerce; they could, through the purchase of foreign products embodying a great deal of labor, cause provisions to be exchanged on the balance for foreign manufactured goods, or cause the net influx of products of land, originating in the demands of foreign landed proprietors, to be less than it otherwise would be. The population of a country thus tended to be increased or decreased respectively through international trade according as this trade caused subsistence to be imported or to be exported on the balance. For example, if the ladies of Paris wore Brussels lace, France's population would be diminished, for the importation of this lace, embodying the flax raised on one acre of Belgian land, would cost France the wine yield of sixteen thousand acres.²³ If, on the contrary, France exchanged "its Labour for the produce of foreign land," or its labor and produce for a "larger Produce of the Foreigner conjointly with equal or greater labour," France would gain, for "its inhabitants are fed at the Foreigner's expense."²⁴ In like manner the exportation of the products of mines, of navigation services, and of other nonland-embodying goods and services in exchange for the prod-

²² *Ibid.*, p. 63. In England and Europe, wrote Cantillon, a "Farmer" normally made three rents: (1) the "true Rent," equal in value to one third of the produce, which went to the proprietor; (2) a second rent for the maintenance of the farmer and the men and horses employed by him on the Farm; (3) "a third which ought to remain with him to make his undertaking profitable." The two thirds retained by the farmer subsists, "directly and indirectly," all who live in the country and the several urban artisans or undertakers whose products are consumed in the country. The one third received by the proprietor maintains artisans and others employed by him in the city and the "carriers who bring the produce of the country to the city" (*ibid.*, pp. 43 ff., 201).

²³ *Essai*, p. 77; see also pp. 225-35 for other examples.

²⁴ *Ibid.*, p. 225; also pp. 77, 233. "When the Nobility and Proprietors of Land draw from Foreign Manufactures their Cloths, Silks, Laces, etc., and pay for them by sending to the Foreigner their native produce they diminish extraordinarily the food of the People and increase that of Foreigners who often become Enemies of the State" (*ibid.*, p. 75). Only if trade brings back as much produce as is sent out is there no net effect on population (*ibid.*, p. 77).

uce of foreign lands increased the domestic supply of subsistence and the domestic population; the importation of tribute in the form of the produce of foreign lands (he referred especially to ancient Rome) had a similar effect.²⁵ Although Cantillon implied that whether or not foreign trade would augment the population depended upon whether or not it augmented employment, his argument really rested upon the thesis developed above; for trade stimulated or depressed both employment and numbers according as it favored or checked the exchange of labor in the form of manufactured goods for foreign landed products.²⁶

As has already been suggested, Cantillon's argument that population density depends chiefly upon the caprices of the landed proprietors, presupposes a comparatively fixed wage level. For given such a fixed level, it is but necessary to divide the wage coefficient into the fund of subsistence to obtain the population capacity of a region. Had Cantillon not postulated a comparatively fixed customary wage level, he would have been forced to the conclusion that an increased demand on part of landed proprietors for labor might operate chiefly to elevate money and real wages rather than to increase numbers.

In his discussion of living standards and population density, Cantillon indicated: (1) that living standards vary widely in time and place, generally ranging between a subsistence and a comfort level of existence; (2) that the actual number of persons which a given supply of the means of subsistence (or of land) can support depends upon the quantity of these means (or of land) required to support the individual and permit his replacement; (3) that population multiplies up to the level which can be supported at the accepted standard of life;²⁷ (4) that the wage

²⁵ *Ibid.*, p. 85. England and Holland exchanged nonlanded products for provisions, Cantillon said.

²⁶ *Ibid.*, pp. 77, 85, 91, 239, 243. "It would be a great advantage to a State to teach its Subjects to produce the Manufactures which are customarily drawn from abroad, and all the other articles bought there" (*ibid.*, p. 25).

²⁷ "If all land were devoted to the simple sustenance of Man the race would increase up to the number that the Land would support. . . . Men multiply like Mice in a barn if they have unlimited Means of subsistence" (*Essai*, pp. 67, 83). 'The Chinese "are necessarily proportioned to their Means of Living and do not exceed the number the Country can support according to their standard of life" (*ibid.*, p. 69; see also p. 81). Elsewhere (pp. 83-85) he cited the rapidity with which war losses are made up in times of peace, as evidence of man's multiplying power, and the fact that population

level accordingly depends upon the quantitative and the qualitative components of the standard of life. In practice, therefore, wage levels and population densities can and do vary widely. For example, those who eat and dress like the peasants in South France "can live on the produce of an acre and a half of land of medium goodness, yielding a sixfold harvest and resting once in 3 years," whereas those with higher standards may require "the produce of 4 to 5 acres of land of medium quality."²⁸ In South China the produce of one tenth of an acre suffices for the support of a laborer.²⁹

In his treatment of wage formation Cantillon reasoned in general that although wages varied from one occupational group to another, the level of wages in each group was governed principally by factors that influence the labor supply, in especial the scale of living. The wage or amount of produce allowed the commonest labor was fixed by "the custom of the place," by the prevailing "mode of living." The amount of land necessary to support a laborer in accordance with the prevailing "custom" varied greatly; in South China, it was one tenth of an acre; in South France, one and one-half acres; in Middlesex, five to eight acres. The actual wage of the laborer, whether enslaved or free, whether agricultural worker or artisan, corresponded "in value to double the produce of the land required to maintain him" according to the "custom of the place." For since death removed half the laborer's offspring before they became old enough to work, and since the wife and surviving daughters barely earned their living, it was necessary, if the labor supply were to be kept intact, that the laborer earn on the average enough both to maintain

grows far more rapidly in colonies, where there is much land and subsistence, than in mother countries relatively short of land.

²⁸ *Ibid.*, p. 71. "In these estimates nothing is allowed for the food of Horses except for the Plough and the Carriage of Produce for ten Miles" (*ibid.*, p. 73). On p. 81 he writes that "according to the different Manner of Living, 400,000 people might subsist on the same produce of the Land which ordinarily supports but 100,000." The unpublished statistical materials on which Cantillon's estimates are based have never been discovered.

²⁹ *Ibid.*, p. 39. Population density thus depended not only upon the scale of consumption, but also upon the kind of consumption. Bare subsistence might be the lot of the peasant in each of several countries; yet an acre of rice would support more persons at a bare subsistence level than would an acre of grain (*ibid.*, pp. 37, 39, 67-75, 83).

himself and replace his family, that is, double his own maintenance at the customary scale of living. For the barest subsistence the laborer and his family in Europe required the produce of three acres; for bare comforts, the produce of eight to twenty acres.³⁰

Cantillon attributed interoccupational differences in wage levels to interoccupational differences in the ratio of the supply of labor to the demand for labor, and intraoccupational differences in individual remuneration to differences in the personal quality of the workers.³¹ The work of artisans was "naturally better paid than that of Husbandmen" because of the greater direct and opportunity costs attendant upon the acquiring of a handicraft.

Those who employ Artisans or Craftsmen must needs therefor pay for their labour at a higher rate than for that of a Husbandman or common Labourer; and their labour will necessarily be dear in proportion to the time lost in learning the trade and the cost and risk incurred in becoming proficient.³²

Moreover, for "natural and obvious reasons" some "Handicraftsmen earn more, others less, according to the different Cases and Circumstances." Among the factors responsible for these differences in rates of pay Cantillon listed qualities (e.g., ability, good will, trustworthiness) which distinguished some workers from others, or which were prerequisite to the fulfillment of the tasks of specific occupations, and factors (e.g., ability, skill, occupational hazards, time required to learn craft) which limited the supply of workers in some occupations. He failed to show, however, just how these various factors adjusted supply to demand at differing wage levels.³³

³⁰ *Ibid.*, Part I, chap. xi. Presumably, Cantillon was thinking in terms of an average or modal acre.

³¹ *Op. cit.*, pp. 21, 23, 39, 41. Free peasants tended to be better remunerated than slaves in consequence of the greater esteem which attached to free as compared with slave labor, Cantillon's argument suggests (*ibid.*, p. 35).

³² *Ibid.*, p. 19.

³³ *Ibid.*, Part I, chaps. vii-viii, also pp. 27, 119, 121. Most undertakers, though on "unfixed wages," were better paid than artisans (*ibid.*, pp. 41, 55, 203-09). He observed that artisans generally came from the families of artisans, inasmuch as the latter were better able financially to raise their children to trades than were laborers; but he did not comment on differential fertility and its possible effect upon the wage structure.

Although Cantillon did not treat in detail the factors which operated on the supply side to fix wages at a customary level, he did indicate that population growth and density were kept adjusted to the supply of provisions and the scale of living principally by variations in the age at which men married, migration and the positive checks exercising only a secondary influence. Migration, Cantillon's analysis suggests, served principally to proportion "the number of labourers, handicraftsmen and others . . . to the demand for them" in the several regions composing a country, workmen tending to move to places where employment could be obtained.³⁴ The positive checks tended to come into operation only when migration and postponement of marriage proved inadequate.³⁵ In general, however, deferment of marriage constituted an adequate check. For although most men in the lower social classes desired to marry and establish families,³⁶ they generally refused to do so until their incomes were sufficient "to keep their Families in the same style as they are content to live themselves," and to enable them as parents to prevent their children from sinking in socioeconomic status; wherefore, lacking sufficient income, men either would not marry at all,³⁷ or they would defer marriage until they had obtained the

³⁴ *Ibid.*, Part I, chaps. iii-vi, ix. "When they [laborers and artisans] have no work they quit the Villages, Towns or Cities where they live in such numbers that those who remain are always proportioned to the employment which suffices to maintain them; when there is a continuous increase of work there is gain to be made and enough others to share in it" (*ibid.*, p. 25). Of international migration Cantillon said little, merely suggesting that population pressure, or the loss of manufacturing industries, would cause migrants to flow from a country (*ibid.*, pp. 81, 165-69).

³⁵ Infant mortality, which he estimated at 333 per 1,000, constituted the principal positive check, according to Cantillon (*ibid.*, p. 33). When the landless poverty-ridden or the unemployed marry, "the children who come will soon die of starvation with their Parents, as we see everyday in France" (*ibid.*, p. 23). In countries such as China, where the standard of life was very low even in good years, starvation cut down thousands in bad years (*ibid.*, p. 69). A state should possess adequate reserves against bad years and years of war (*ibid.*, pp. 89, 91).

³⁶ The children of the nobility, having been brought up "in affluence," did not generally desire to marry. Only the eldest sons, the beneficiaries of primogeniture, tended to marry. Younger sons, having received little property, usually entered the "army" or the "cloister"; they tended to marry only if "offered Heiresses and Fortunes, or the means of supporting a Family on the footing which they have in view" (*ibid.*, pp. 77, 79). "All the lower orders wish to live and bring up Children who can live like themselves" (*ibid.*, p. 79).

³⁷ Some, in the lower classes, though financially able to marry, preferred a high scale of living to marriage, he said (*ibid.*, p. 79).

means wherewith to support a family in keeping with the customary scale of living of families in their social class. Laborers and artisans contemplating marriage always had about them the warning examples of poverty-stricken families whose plight was traceable to marriage on little or no means. In short, then, fear of falling in social and economic status, rather than ambition to rise in the social and economic hierarchy, constituted the real motivation to the deferment of marriage and the principal ultimate check to population growth;³⁸ and this fear became operative, sooner or later, according as the scale of living was high or low.

Cantillon took it for granted that the scale of living tended to rise with ease and to fall with difficulty.³⁹ Although he did not indicate in detail the manner in which the scale of living tends to expand, he pointed out, in his discussion of "the increase and decrease in the quantity of hard money in a State," that the immediate beneficiaries of such an increase (e.g., mine owners, undertakers, some mechanics) augmented their "consumption" and "standard of expense" and resisted its subsequent reduction. At the same time some of those who received fixed money incomes, and in consequence of an increase in the supply of money suffered a diminution in real income, tended to emigrate unless food production or food imports increased sufficiently to permit them to maintain their previous scale of living; some even emigrated because they could not enjoy the new higher scale. Migration and price adjustments continued until a new equilibrium was established.⁴⁰ Elsewhere he observed that those who earned more than mere subsistence tended to imitate the consumption of the lords and the landowners;⁴¹ and that the luxurious con-

³⁸ *Ibid.*, pp. 23, 77-81. Gross fertility, therefore, was very much short of its potential maximum. "A young Woman takes care not to become a Mother if she is not married; she cannot marry unless she finds a Man who is ready to run the risk of it. Most of the People . . . live in uncertainty [whether they will be able to support] . . . their household on the footing they have in view" (*ibid.*, p. 81).

³⁹ "Nothing is easier or more agreeable than to increase the family expenses, nothing more difficult or disagreeable than to retrench them" (*ibid.*, p. 169).

⁴⁰ *Ibid.*, Part II, chaps. vi-viii. He had Spain in mind (*ibid.*, p. 167).

⁴¹ *Ibid.*, pp. 63, 75. On p. 93 he writes: "The example of the Prince, followed by his Court, is generally capable of determining the inspiration and tastes of the other Proprietors of Land, and the example of these last naturally influences all the lower ranks."

sumption of the pace-setting nobility and landowners was great or less according as the ownership of land was concentrated or diffused.⁴² Presumably, then, he found the principal sources of change in living standards and wage levels in modification of the general price level and in the extent to which the ownership of landed property was concentrated. He pointed out, moreover, that the standard of living had risen so markedly that the population of many countries in Asia, Africa, and Europe had decreased;⁴³ and that in light of the tendency of the standard of living to rise, one could not suppose, as had Petty and Davenant, a high and unchanging rate of natural increase.⁴⁴

Cantillon, in many respects a mercantilist,⁴⁵ subscribed in part to the populationist view. True, in one place he declared that it was "outside" the scope of his discussion "whether it is better to have a great multitude of Inhabitants, poor and badly provided, than a smaller number, much more at their ease; a million who consume the produce of 6 acres per head or 4 millions who live on the produce of an Acre and a half."⁴⁶ On the whole, however, he seems to have favored policies conducive both to the fiscal strength of the state⁴⁷ and to the development of as large a population as the state could support in ease and comfort on its own produce. This attitude is most marked in his treatment of foreign trade. When states are great, he observed, they have "no need to increase the number of their inhabitants" but merely "to make those who are in it live there on the raw produce of the state with more comfort and ease and to increase the strength of the state for its defence and security."⁴⁸ He favored augmenting the fiscal strength of the state through the exchange of domestically produced manufactures for gold and silver,⁴⁹ but not through the exchange of raw produce for specie, saying that

⁴² *Ibid.*, p. 93.

⁴³ "Englishmen, in general, consume more of the produce of Land than their Fathers did, and this is the real reason why there are fewer Inhabitants than in the past" (*ibid.*, p. 83).

⁴⁴ *Ibid.*, p. 83.

⁴⁵ E.g., *ibid.*, pp. 25, 181, 243.

⁴⁶ *Ibid.*, p. 85.

⁴⁷ E.g., *ibid.*, pp. 89, 91, 189, 191, 235, where he states that the possession of specie contributes to the military and economic power of a state.

⁴⁸ *Ibid.*, p. 233.

⁴⁹ *Ibid.*, p. 233. Foreign trade was essential also if a state were to afford "a flourishing navy" (*ibid.*, p. 243).

the latter method diminished population.⁵⁰ Moreover, he opposed the exportation of raw produce in exchange for manufactures on the ground that such exchange swelled the population of the state exporting manufactures at the expense of the state exporting agricultural products and diminished population in the latter.⁵¹ It was desirable, rather, that a people manufacture such goods as it consumed.⁵² In substance then, in so far as international trade was concerned, Cantillon opposed the importation of *work* or *jobs* in the form of foreign manufactures purchased through the exportation of domestically raised raw produce, because such exchange decreased the domestic population and increased that of foreign lands. At the same time Cantillon apparently did not favor any great development of manufactures for the purpose of exchanging fabricated goods for foodstuffs and swelling the population beyond the capacity of the state to support with domestically raised produce.⁵³

The views described in the preceding paragraph permeated in some measure Cantillon's treatment of the internal economy of the nation. Like the mercantilists, he emphasized the need of keeping the population engaged in useful tasks. Feast days weakened Catholic countries by reducing the "labour of the People by about an eighth part of the year." Monks were "neither useful nor ornamental . . . this side of heaven," not so much

⁵⁰ If specie is imported in exchange for raw produce, "this will not fail to enrich the State at the cost of a decrease of the Population; but if Gold and Silver be attracted from abroad in exchange for the Labour of the People, such as Manufactures and articles which contain little of the produce of the soil, this will enrich the State in a useful and essential manner" (*ibid.*, p. 91; but cp. n. 51, below).

⁵¹ *Ibid.*, p. 235. Only in years of unusual agricultural surpluses did it benefit a state to exchange some raw produce for specie (*ibid.*, p. 233).

⁵² "If the proprietors of Land and the Nobility in Poland would consume only the Manufactures of their own State, bad as they might be at the outset, they would soon become better, and would keep a great Number of their own People to work there, instead of giving this advantage to Foreigners; and if all States had the like care not to be the dupes of other States in matters of Commerce, each State would be considerable only in proportion to its Produce and the Industry of its People" (*ibid.*, p. 77; also pp. 75, 91, 233).

⁵³ He seems to have believed states with adequate raw material reserves to be more secure than those without reserves (*ibid.*, pp. 85, 89, 91). A large state (*ibid.*, p. 91) could not greatly swell its food imports through foreign trade, as foreign markets were too small. Only smaller countries (*ibid.*, p. 85), such as England and Holland, could appreciably increase their subsistence by importing landed products in exchange for labor in manufactures and navigation. In Part III, chap. i, however, Cantillon argues that foreign trade and a favorable balance are essential to the power of the state.

because they were celibate but because they were idle.⁵⁴ It was useless to teach people trades unless they could pursue them.⁵⁵ Though not wholly opposed to luxury, Cantillon indicated that when luxurious consumption expanded beyond a certain level, industrial expansion was retarded and the state tended to decay.⁵⁶ He did not sharply specify when this level had been reached, however. "It is worth while to encourage it ['employment for ornament or amusement'] unless the Man can find a way to employ himself usefully."⁵⁷ He went on to say that whether or not useful employment was available depended upon the "Proprietors of Land" who could make the state rich and populous by employing "on some useful work the Inhabitants supported" on their land, adding that "the Prince" and "his Court" could set an appropriate example. He indicated, too, that population tended to be less in countries where there were many cities, not because urban populations failed to replace themselves, but because the presence of cities signified that less raw produce was being raised than the land was capable of yielding;⁵⁸ yet he did not condemn cities.

Before examining the opinions of Cantillon's French followers, we shall determine to what extent his major opinions were original. The sources of such of Cantillon's ideas as were not original with him were English, above all the works of William Petty. Cantillon's emphasis upon the role of the landed proprietor does not appear in the works of any of the English writers who might have influenced Cantillon; it was substantially orig-

⁵⁴ *Ibid.*, pp. 93, 95. A noble in time of war served the state and in time of peace acted as a magistrate or as "a great ornament to the Country" (*ibid.*).

⁵⁵ *Ibid.*, p. 25.

⁵⁶ E.g., *ibid.*, pp. 185, 193, 199, 235, 237.

⁵⁷ *Ibid.*, pp. 91, 93. Normally, Cantillon declared, of each 100 persons only 50 contributed to the needs of man "by the Labour of their hands," the other 50 being either too young, too old, sick, or occupied as proprietors and undertakers. Of the 50 handworkers, 25 sufficed to maintain the entire 100; the remaining 25 were available for service as soldiers, domestics, fabricators, or better still, as miners and metal workers. Cantillon saw "no objection" to employing some of these last 25 on "ornament and amusement" when "work useful and profitable to the State" could not be supplied to all 25 (*ibid.*, pp. 87-91).

⁵⁸ Cantillon supposed that normally one half of the population would live and work in the city and obtain from farmers and proprietors at least one half and probably more of the produce of land in exchange for urban-made goods and services (*ibid.*, p. 45, also p. 23).

inal with him, and may have been the result of his observation of the role of wealthy landed proprietors on the Continent.⁵⁹ Cantillon's argument in favor of the exportation of the products of labor was not essentially original with him, English writers having long reasoned that a country should export "wrought" rather than "unwrought" articles and thus employ its people at the expense of foreigners, and French writers having maintained in some instances that manufactures should be exchanged for raw materials and produce.⁶⁰ The thesis, as developed by Cantillon, that the population of the labor-exporting country could be augmented through the importation of foreign landed products appears to be somewhat more original. The English writers had merely noted that population would be greater where there was more employment, but had not worked out so fully the connection between types of imports and exports and population growth as had Cantillon. Moreover, the English writers had in view principally nondemographic objectives such as the abolition of pauperism, a favorable balance of trade, and the development of manufactures; not until after 1750 did English writers (Tucker, Harris, Steuart, Young) explicitly argue that the purpose of foreign trade was to obtain a favorable "balance of labour."⁶¹ Can-

⁵⁹ A comment by Locke, from whom, among others, Cantillon could have derived his emphasis upon the importance of labor as a factor of production, may have suggested to Cantillon the significance of the role of the proprietor. For Locke, in a criticism of an argument advanced by Filmer, says "that he that is proprietor of the whole world, may deny all the rest of mankind food, and so at his pleasure starve them. . . . It is more reasonable to think, that God, who bid mankind increase and multiply, should rather give them all a right to make use of food and raiment . . . than to make them depend upon the will of a man for their subsistence"; for such a man, in virtue of his control of subsistence, could tie other men "to hard service" and hinder multiplication. In proof Locke cited the absolute monarchies of the world where, he implied, conveniences were lacking to the masses, and their growth was checked (*Two Treatises of Government*, 1690, Bk. I, sec. 41).

⁶⁰ On this mode of argument see E. A. J. Johnson, *Predecessors of Adam Smith*, esp. chap. xv; J. Viner, *Studies in the Theory of International Trade* (New York, 1937), pp. 51-57; also M. T. Wermel, *The Evolution of the Classical Wage Theory* (New York, 1939), chaps. i-ii, v. Cantillon's possible sources are commented upon briefly by M. Pasquier, *Sir William Petty. Ses idées économiques* (Paris, 1903), and in R. Legrand, *Richard Cantillon* (Paris, 1900). Petty, Locke, Davenant, and Hobbes, with whose works Cantillon apparently was familiar, had noted that a state tended to benefit through the export of manufactures.

⁶¹ Johnson, *op. cit.*, pp. 228-31, 307-08; Viner, *op. cit.*, pp. 52-56. Robert Wallace (see n. 62) in 1753 said that a country could augment its population by importing provisions. Galiani (*Della Moneta*, 1750, IV, 2, 294-95) said that the Kingdom of Naples, by exporting grain, peopled foreign countries.

tillon's treatment of wage determination and of the standard of living was likewise somewhat superior to that of his English contemporaries and predecessors.

A number of French writers were influenced, directly or indirectly, by Cantillon's views with respect to population, above all Mirabeau, Condillac, Pluquet, Garnier, and Peuchet. Du Buat-Nançay adopted his theses that the exportation of subsistence checks population growth, and that the use of land to produce superfluities prevents its use to subsist men. Ange Goudar may have borrowed from Cantillon the notion that population growth is checked by the use of land for parks and hunting preserves, rather than for the production of subsistence; in Landry's opinion, however, he failed to see that the use of the land is determined by the pattern of consumption.⁶² Grimm, Mably, Gournay, Morellet, and Graslin were familiar with Cantillon's ideas on population, but their views reflect no especial indebtedness to him. Quesnay and the physiocrats distinguished between "luxe de subsistance" and "luxe de décoration," but developed a theory contradictory to Cantillon's.

II

Victor R. Mirabeau's (1715-1789) celebrated *L'ami des hommes*,⁶³ published about a year before Mirabeau joined the ranks

⁶² Landry, *op. cit.*, p. 366, also pp. 321-23. Robert Wallace pointed out that if the ownership of land were concentrated in a country, it would be peopled to the limit of its capacity to supply subsistence only on condition that the rich landowners desired luxuries and offered provisions in exchange for them; but he did not emphasize the crucial importance of the landowner, nor indicate that a landowner might use very large amounts of land for the satisfaction of his own wants. Wallace's work, *A Dissertation on the Numbers of Mankind in Ancient and Modern Times* (London, 1753), was published in translation in France in 1754, and again in 1769, in combination with his reply to Hume. See Wallace's general maxims, No. 3 and No. 5. Hume, in his essay on the populousness of ancient nations, observed that spending revenue on dogs, horses, lackeys, etc., would prevent a state from supporting as many people as it could support (*Political Discourses*, Edinburgh, 1752, p. 179). Hume and Wallace may have been influenced by extracts from Cantillon's *Essai* printed by Postlethwayt as early as 1749 (*Essai*, Higgs ed., pp. 383-84, 390, for Postlethwayt's use of Cantillon's materials). Malthus, Landry infers (*op. cit.*, pp. 373 ff.), reasoned somewhat as did Cantillon, in consequence of Paley's influence.

⁶³ *L'ami des hommes, ou traité de la population* [3 parts] (Avignon, 1756). This work went through twenty editions in 1757-60 (Weulersse, I, 53). References, unless otherwise indicated, are to the 1756 edition. L. Brocard has discussed the background of *L'ami* in his *Les doctrines économiques et sociales du Marquis de Mirabeau dans l'ami des hommes* (Paris, 1902).

of the physiocrats, embodies many of Cantillon's notions. Despite Cantillon's influence, however, and despite the author's contact with Montesquieu and his works, Mirabeau at times inconsistently made population both the source of wealth and the resultant of agricultural production (or subsistence). Moreover, Mirabeau did not classify luxuries carefully, reasoning rather that all types of luxury were nearly equal, if not equal, in their unfavorable effects upon population growth. Finally, unlike Cantillon, Mirabeau specifically advocated the promotion of population growth. Nonetheless, whatever the shortcomings of his *L'ami* from the physiocratic point of view, this work was probably more responsible than any other for the attention given to population questions in the third quarter of the eighteenth century; furthermore, it embodied many of the basic ideas expressed in his later physiocratic writings.⁶⁴

Much of Mirabeau's work is based upon the premise that since population growth is the basic source of wealth,⁶⁵ obstacles to its growth, such as luxuries, must be removed, and agriculture,

⁶⁴ This embodiment Mirabeau himself later denied. In a letter (July 30, 1767) replying to Rousseau's criticism of the physiocratic views on natural law and population, Mirabeau suggested that Rousseau's ideas resembled those held by him (Mirabeau) before meeting Quesnay and mastering his doctrines. Cantillon's manuscript (see above), with its erroneous stress upon commerce, had led Mirabeau to reason as follows and to advocate, on the basis of this seemingly invulnerable reasoning, sumptuary laws and gaudy measures to promote marriage: "Riches [or wealth] are the fruits of the soil for the use of man; the work of man alone has the knack of multiplying them. Thus the more there will be of men, the more there will be of wealth. The path of prosperity then is: (1) to multiply men; (2) through these men, productive labor; (3) through this labor, wealth."

At this reasoning Quesnay had laughed, saying that Mirabeau had put the "cart before the horse" and that Cantillon was "only a *soi*." Men were like sheep, and sheep increased only as pasturage increased. Man did not come to earth carrying bread in his pocket on which to live until he had secured a crop from the earth. "I was caught; it was necessary to suppose that man had licked his paw eighteen months like the bear in his den in winter, or to avow that this creator of fruits had found on arriving that which he had not sown." Quesnay then showed him that the consumption of useful products with exchange value becomes the source of yet more products, thus constituting the necessary basis for an increase in population. Mirabeau observed to Rousseau that the theory of population "is the Key and the Kernel of all economic science"; that man can violate the laws of the natural order relative to subsistence and multiplication "only under penalty of suffering and death" (T. Dufour, *Correspondance générale de J. J. Rousseau*, Paris, 1932, XVII, esp. pp. 174, 176-78). See below, Chapter V, for Mirabeau's physiocratic views.

⁶⁵ "The true principle of all wealth is then the multiplication of the human species called population, it is the object of this Treatise" (*L'ami*, III, 171).

its ultimate source, must be stimulated. In the *avertissement*⁶⁶ he promises to develop inductively

a moral philosophy so austere that it will revolt many people. I am going to create an infinity of men; what an embarrassment to govern them. I am going to render them laborious and wealthy; how many people have sagely told me that it is not necessary that the lower classes (*le peuple*) experience a comfort that would render them insolent. I am going to diminish the number of horses and equipages, and place their augmentation on the level with incendiarism and parricide; I am going to prove finally, yes, demonstrate that luxury is, in proportion, the abyss of the great State even more than of the small.

He concludes his work in these words:

True wealth consists only in population; population depends upon subsistence; subsistence is drawn only from the soil; the product of the soil depends upon agriculture, whence it follows that all other means, commerce, gold, the sciences, the arts, serve and establish a fixed and independent prosperity, in so far as they vivify, encourage, and illuminate agriculture, the first, the most useful, the most innocent and the most precious of the arts.⁶⁷

Despite his emphasis upon the wealth-creating power of population,⁶⁸ Mirabeau observed in words similar to those of Cantillon that population growth was governed by subsistence; that all animated beings tend, under the urge of the "unalterable" reproductive and multiplicative "faculty," to increase to the limit of subsistence.⁶⁹

The measure of subsistence is the measure of population. . . .⁷⁰

If the multiplication of a species depended upon its fecundity, certainly there would be in the world one hundred times more wolves than sheep. . . . The earth is covered with [sheep] . . . whereas [wolves are] very rare. Why is that? It is because grass is extremely scanty for wolves, & very extensive for sheep.⁷¹

⁶⁶ *L'ami*, I, iii-iv.

⁶⁷ *Ibid.*, III, 216.

⁶⁸ "Nourishment, commodities, and the pleasures of life make wealth. The soil produces it, and the labor of man gives it form. The fund and the form make the earth and man" (*ibid.*, I, 10). "La subsistance n'a que deux racines, *l'agriculture* travail premier & de production, *l'industrie* travail second & de perfection" (*ibid.*, I, 188).

⁶⁹ *Ibid.*, I, 11-12; III, 171-72.

⁷⁰ *Ibid.*, I, 11. These words form the chapter heading.

⁷¹ *Ibid.*, I, 12.

So also with men. "Men multiply like rats in a barn, if they have means of subsistence. . . . If you place one horse more in the State, other things remaining equal, you are certain to kill at least four men."⁷²

Like Cantillon, therefore, Mirabeau reasoned that since population depends upon subsistence, numbers are conditioned both by the uses to which land is put and by the effect of foreign trade upon the supply of subsistence. If land is left uncleared and uncultivated, or is used for other purposes than the production of subsistence (e.g., for decorative gardens, unnecessary roads, provision of food for many horses, etc.), both the supply of subsistence and population will be less than they might be.

It is then a fact that if the Prince & the proprietors love horses, or, to say it better, if they employ many horses, . . . there will be more meadows in the State, and fewer fields for the subsistence of men; that if they consume more wood, it will be necessary that more ground be destined to go into forests for annual cutting; that the mode of grass plots, hedges, parks, great avenues, highways of extraordinary size &c. removes as much ground for the nourishment of man as is employed in all these inutilities. If on the contrary the *mœurs* of the Prince and of the great proprietors impel them to support many men, the pasturage of horses will decrease in proportion.⁷³

In proportion as one cultivates the soil & one employs it to produce that which is the essential nourishment of man, the species increases in number; in proportion as one lets it lie fallow, or as one employs it in inutilities, the species diminishes; whence it follows that the consumption of superfluities is a crime against society, which is of the nature of murder and homicide.⁷⁴

Mirabeau was less explicit than Cantillon, however, when asserting that foreign trade would foster population growth in proportion as it made possible the exchange of French nonlanded for foreign landed products. "Carry abroad as much as you are able of gold and worked materials, bring back with you at first consumable provisions, & in their absence raw materials which serve as capital for the labour of your manufactures."⁷⁵ Let

⁷² *Ibid.*, I, 16, 17-18. In other words, the land required to feed a horse would subsist four men.

⁷³ *Ibid.*, I, 87.

⁷⁴ *Ibid.*, I, 172.

⁷⁵ *Ibid.*, III, 15-16.

France exchange industrial products—products fabricatable in infinite variety in France—for the various provisions obtainable abroad and suited to subsist the French population, and, in so far as desirable, for materials utilizable in manufactures. “The most perfected manufactures, . . . those in which the value of the labor most exceeds that of the primary material, are the most advantageous. . . . All that which is material is expense, all that which is in labor is profit.”⁷⁶ For this reason, and also because he believed that France enjoyed, in consequence of the size and competence of her population, a differential advantage in the production of fabricated goods which could be exchanged for foreign provisions and raw materials,⁷⁷ Mirabeau advocated, on the one hand, the use, when necessary, of protectionism to develop French manufacturing and industrial markets,⁷⁸ and on the other, the removal of restrictions on the internal and the external grain trade. He apparently believed that internal freedom would favor the production and proper distribution of grain. He denied that external freedom would cause famine, but he did not yet contend that France had an exportable surplus of grain.⁷⁹

Unlike Cantillon, Mirabeau apparently believed that the uses to which land was being put were more dependent upon the “mœurs & usages”⁸⁰ than upon the mere wills of the proprietors. The *mœurs*, he said, “have infinitely more influence in society than the Laws . . . [and] must be the principal point of view of a populator.”⁸¹ He proposed, therefore, that the French government, if interested in the stimulation of population growth, impose a capitation tax upon horses rather than upon men, inasmuch as “the multiplication of horses in a State is an Evil.” This tax was to be progressive, ranging from a low rate on useful work

⁷⁶ *Ibid.*, III, 30-31; also III, 201, where he says that subsistence drawn from abroad extends the domestic population at the expense of foreign lands.

⁷⁷ *L'ami*, III, 16-18. He opposed the exchange of fabricated goods for gold, the heavy influx of which, he said, undermined the *mœurs* and conduced to depopulation (*ibid.*, I, 119 ff.; III, 183).

⁷⁸ Brocard, *op. cit.*, pp. 186-94.

⁷⁹ *L'ami*, III, 21-30, 201-02; chap. v. He opposed export bounties, saying that if bounties must be paid, they should go to importers; and criticized the interdiction of the planting of vines, saying that vine-land would be converted into grain-land as population growth increased the demand for grain (*ibid.*, III, 21, 22, 26-30). See also Weulersse, I, 564, 577; II, 14, 30, 104-05, 275-76, 502.

⁸⁰ “The employment that is made of the earth depends upon the *mœurs* and usages” (*ibid.*, I, 85).

⁸¹ *Ibid.*, II, 56 and 59.

horses to a very high rate on coach horses, which he considered most useless from a social point of view.⁸²

In consistence with his thesis that population growth is determined by the supply of subsistence, Mirabeau described as without much effect a number of conditions then viewed as unfavorable to population growth. Since subsistence is the measure of population, war, epidemics, emigration, and the maintenance of permanent armies cannot, in the long run, check population growth. Religious celibacy cannot check population growth so long as the celibates produce as much as they consume; if they consume less, they support population growth. Sumptuary laws and laws to promote marriage and natality were almost certain to prove futile. It would be of some use to aid foundlings and unmarried mothers, to honor mothers who suckled their children, and to attract foreign immigrants through facilitation of naturalization and the abolition of the *droit d'aubaine*.⁸³

Although Mirabeau did not deal directly with the effect of the standard of life upon population growth, he clearly recognized its operation in his treatment of luxury⁸⁴ and of the effects of inequality. He denied Melon's view that luxury industries were necessary to provide employment. Luxurious consumption (the product of the growth and concentration of wealth and of the abundance of gold) checked population growth in three ways: it diverted land from its proper employment, the yielding of subsistence; it fostered the development of urban and luxury-creating industries and arts, and thus diverted man-power from agriculture; it served, in conjunction with bad customs, to inspire contempt for agriculture and rural life, to inculcate in men the desire for more goods and for higher social status for themselves and their children, and thus to cause men either to avoid marriage or to limit family size. Moreover, women, exposed to the influence of luxurious consumption, were unwilling (for personal

⁸² *Ibid.*, I, 100-02. Nonetheless, as late as 1760, he approved exempting the nobility and the clergy from taxation (Brocard, *op. cit.*, pp. 383-84), even though other writers contended that these two groups did not use their lands completely and efficiently.

⁸³ *L'ami*, I, chap. ii; II, 89; III, 36-37, 171-72; Puvilland, *op. cit.*, pp. 155-65.

⁸⁴ "In the lowest ranks, as in the first, that which was formerly folly today is become usage & almost necessity" (*L'ami*, I, 146).

reasons) or physically unable to bear many children, or to suckle them as they were duty-bound to do; nor could they always give birth to healthy children.⁸⁵ Luxury had already brought about the physical degeneration and the enervation of part of the French population, Mirabeau asserted.⁸⁶

Mirabeau did not conceive of an optimum population, presumably because he believed that numbers had declined in France and elsewhere,⁸⁷ that agriculture was in its infancy, and that population growth would augment the prosperity and the welfare of the French people.

I do not doubt that some who read me think within that it is worth more to a State, or at least to the individuals who compose it, that there be fewer men, but comfortable and living as they like, than a great number forced to sobriety and modesty. This petty genteel sentiment is good for the same use as the sonnet of the Misanthrope; but beyond that it is infamous and cruel, I shall prove presently that it is false and erroneous.⁸⁸

Like some of the mercantilists, he insisted that numbers were useful to the state only in proportion as they were kept employed.⁸⁹ Unlike Colbert, however, Mirabeau does not appear to have favored sacrificing the welfare of the masses to population growth, in event of the existence of such a conflict in ends. In general, even though he recognized at times that population might become so dense that the excess portion would have to secure provisions through international trade or emigrate,⁹⁰ he did not give much attention to the possibility and the probability of population pressure.

Although Mirabeau believed that governmental arrangements could affect the rate of population growth,⁹¹ he observed that

⁸⁵ *Ibid.*, I, 11-12, 18, 107, 126-27, chaps. iv-v, esp. pp. 89, 100-05, 114-16; III, 172, 175-76, 191-95.

⁸⁶ *Ibid.*, II, 115-18.

⁸⁷ France numbered nineteen million under Charles IX, seventeen under Louis XIV, according to Mirabeau (*ibid.*, I, 55; also pp. 11, 13-16). In 1760 he estimated the population of France at sixteen million (Weulersse, II, 288).

⁸⁸ *L'ami*, I, 102.

⁸⁹ *Ibid.*, I, 115-16; III, 180, 185, 200.

⁹⁰ *Ibid.*, III, 17-18, 72, 204-05. He observed that colonies could provide outlets for surplus population, but, unlike many of his contemporaries, he concluded that colonies flourished most under a system of economic liberty (*ibid.*, III, chap. vi; also Brocard, *op. cit.*, pp. 195-228).

⁹¹ *L'ami*, III, 88-89. Until he became a physiocrat Mirabeau was not wholly

policies designed to rehabilitate rural life and revivify agriculture constituted the means most likely to restore and to accelerate population growth, inasmuch as agriculture was the source of subsistence. Not only was the countryside the "sole source of Population"; country people also were healthier and more frugal than urbanites, and, in consequence of their supporting themselves at an early age, saner and more balanced in judgment.⁹² As a populationist, therefore, Mirabeau urged a reduction of the tax and other burdens incident upon agriculture; the development of esteem for agriculture in order that hands might be attracted to it; the provision of sufficient agricultural capital at low interest rates; economic liberty and security for cultivators; a diminution in economic inequality which hurt agriculture and checked population growth; the substitution of small for large landholdings, inasmuch as the former were more favorable to production and less conducive to absentee ownership and luxury; and measures to prevent growing cities and the expanding army and marine from taking too many persons out of agriculture and unfitting them for rural life.⁹³

Although Mirabeau developed no wage theory in *L'ami des hommes*, he observed several times that growth of population intensifies competition among workers and gives to densely populated areas a differential advantage in the production of fabricated goods.⁹⁴ In view of his stress upon the dependence of population growth on the augmentation of subsistence, it is likely that he believed wages tended to remain at a low, near-subsistence level.⁹⁵ Mirabeau conceived of society in hierarchical terms,⁹⁶

opposed to governmental intervention. Man had two penchants, "sociability" and "cupidity" (the desire to appropriate everything for himself). The government could properly seek to curtail "cupidity" and to strengthen "sociability." In general, however, Mirabeau had little faith in the conduct-changing effects of laws, for he believed men to be creatures of custom (*ibid.*, I, chap. i; II, 56, 59).

⁹² *Ibid.*, I, 17; III, 117.

⁹³ *Ibid.*, I, chaps. ii-vii; II, chap. viii; III, chap. v, pp. 173-85, 198-200, 205-07; also Weulersse, I, 312-16, 384-85, 398, 414, 431, 436, 443; II, 14, 30, 273. Mirabeau considered assigning to the eldest son the bulk of the parental property to be unfavorable to population growth (*L'ami*, I, 90-91). ⁹⁴ *Ibid.*, III, 18, 201.

⁹⁵ He opposed the exchange of French goods for gold in part because "superabundance of gold . . . alone is able to elevate the price of labor" (*ibid.*, III, 18). Cantillon had reasoned in a similar manner (*Essai*, pp. 167, 169).

⁹⁶ *L'ami*, I, 4.

and believed the shortening of the working day to be a check to the growth of wealth;⁹⁷ yet he asserted that misery causes indolence, not laboriousness, that the prospect of some comfort inspires men to work hard, and that the common man is the foundation of an economy.⁹⁸

III

Condillac (1715-1780), known today chiefly for his contributions to psychology,⁹⁹ in his treatment of the causes and consequences of population growth followed Cantillon much more closely than the physiocrats, who criticized his views.¹⁰⁰ Like Cantillon, he reasoned that the size of the population depended upon the pattern of production, which in turn depended upon the pattern of consumptive wants, but he gave somewhat less weight to the influence of the proprietors upon consumption.¹⁰¹ He looked upon land as the ultimate source of wealth and taxes, even as did the physiocrats; but he refused to admit that industry and commerce are unproductive. Labor gives new and useful

⁹⁷ *Ibid.*, I, 148-53.

⁹⁸ *Ibid.*, I, 59-60.

⁹⁹ In his clear and logical *Traité des sensations* (1754) Condillac went far beyond Locke and Hartley in the formulation of a sensationist psychology; he treated mental life as an aggregate of sensations and assumed that pleasant experiences tended to dominate in life because of man's inherent nature. In his *Essai sur l'origine des connaissances humaines* (1746) he emphasized the importance of the development of language for progress in knowledge. Condillac's psychological theory was important in that it provided the principles from which the theory of indefinite and extensible progress could be deduced: if human nature was indefinitely malleable it could be indefinitely improved through education and the establishment of an appropriate institutional medium. His theory that man naturally prefers agreeable sensations, together with his theory of the malleability of human nature, could be used to support the view that living standards tend to rise. On Condillac's relation to the physiocrats and other economists of his day, and on the relation between his psychological and his economic theories, see A. Lebeau, *Condillac économiste* (Paris, 1903), pp. 5-15, 26-44, 83-133.

¹⁰⁰ *Le commerce et le gouvernement considérés relativement l'un à l'autre* (Paris, 1776). Page references here are to the edition included in Condillac, *Œuvres* (Paris, 1798); this edition is unchanged from the 1776 edition with respect to the subject matter here treated.

¹⁰¹ *Commerce*, pp. 247-48. Although Condillac believed that the proprietors, through their ownership of land and through their great spending power, exercised most influence upon the patterns of production and consumption, he observed that the demand for each class of workers issued in part from each other class. "Si l'artisan et le marchand sont salariés du colon, auquel ils vendent, le colon l'est à son tour de l'artisan et du marchand auxquels il vend, et chacun se fait payer de son travail" (*ibid.*, Part I, chap. viii). The need that citizens had for the services of one another "placed all in mutual dependence" (*ibid.*, Part I, chap. xxiv). Cp. Cantillon, n. 22 above and accompanying text, pp. 117 ff.

forms to matter, he remarked, adding that the wealth of a nation depends upon the amount of work done. Commerce likewise was productive, for it enabled one to exchange goods of little or no utility to him for goods useful in his eyes.¹⁰² The prosperity of a people depended, he said, not upon the development of any one part of the economy, but upon the maintenance of an appropriate balance between different branches of agriculture, manufacturing, and commerce; this balance was most likely to be attained under conditions of *laissez faire*.¹⁰³ In his criticism of egalitarianism, in his defense of private property and free competition, and in his conception of the role of civil law, his views resembled those of the physiocrats.¹⁰⁴ He did not treat property as a right deriving from man's natural right to dispose of his personal activity, as had the physiocrats, but viewed it as an institution that had developed historically and with communal consent.¹⁰⁵

Condillac reasoned, as had Cantillon, that the density of population in a country was governed primarily by the use to which the land was put and by the scale of living; but, as has already been noted, he did not emphasize as much as Cantillon the importance of the landed proprietors in determining the use to which land was put. "There is in a country always only the quantity of inhabitants that it is able to nourish. There will be fewer, other things equal, if each of them consumes more: there will be fewer still, if a part of the land is consecrated to productions which do not nourish them."¹⁰⁶ The quantity of production in a country was limited by the extent of the land and by the care given to its cultivation. The upper limit of production having been reached, the output of any one type of product could be

¹⁰² *Ibid.*, pp. 52-67, 73 ff., 79, 87, 289 ff., 301 ff. His statement that land is "l'unique source de toutes les richesses" (p. 53) resembles that of Cantillon rather than that of Quesnay. When he says that merchants "produce nothing" (p. 87), he apparently means nothing material, for he conceives of production in terms of utility rather than in terms of material (see Part I, chap. i).

¹⁰³ *Ibid.*, pp. 301-17.

¹⁰⁴ *Ibid.*, Part I, chaps. x-xii.

¹⁰⁵ *Ibid.*, Part I, chap. xii. Although he said that "wherever there are mendicants the government is vicious" (*ibid.*, p. 476), he described as "jargon" the implication of Necker and others that the "rights of humanity" were being sacrificed to the "rights of property" by advocates of free trade in grain (*ibid.*, pp. 467-68).

¹⁰⁶ *Ibid.*, p. 252.

expanded only at the expense of diminishing the output of some other type of product. For example, more forage could be made available only by contracting the acreage in grain. Furthermore, inasmuch as some products were less appropriate than others to subsist men, the capacity of a region to support population depended upon the kind of crop raised. "If the land is employed to support many horses, it will not be able to support the same number of men."¹⁰⁷ In short, therefore, the supply of subsistence depended upon the uses to which the land was put, and the supply of subsistence being given, population was more or less dense according as the scale of living was low or high.¹⁰⁸

For purpose of illustration Condillac starts with an isolated area of ten million arpents and a standard of life requiring one arpent a person. Given these circumstances, the population will grow to a maximum of ten million. If, however, some proprietors become richer than others and congregate in cities, the pattern of wants will change. Each proprietor will consume the products of more than one arpent. Moreover, horses will have to be raised to carry the goods to town, and will consume the products of land which might otherwise have subsisted men. Artisans and merchants, enriched by the trade of supplying the proprietors, will imitate the standards of the latter. Small merchants, artisans, and laborers, who subsist from day to day, will also emulate the proprietors and consume proportionately more when and if slight wage increases make this possible. In short, although each person will live according to his station, the consumption of each will increase, and the amount of land required to provide the wants of each person will slowly rise; families will decline in number and size, and the total population will decrease slowly but continuously and appreciably until the limits to this consumption-expanding process have been reached. An increase in per capita needs, such as has been described, will fail to occasion a diminution in population only on condition that the

¹⁰⁷ *Ibid.*, p. 252. Later (p. 260), having noted that land used to feed cattle could not be used to subsist men, Condillac added that this loss was compensated in part by the fact that the manure of the cattle augmented the fertility of the soil and its capacity to produce food. Messance (see below) developed this argument more fully.

¹⁰⁸ "Population diminishes in proportion as wants multiply" (*ibid.*, p. 252).

assumed area is surrounded by other areas into which the population may spread.¹⁰⁹

Condillac devoted less attention than Cantillon to the effect of international trade upon population growth. A defender of economic liberty and freedom of trade in nonagricultural as well as in agricultural products, Condillac reasoned that countries enjoying such freedom of trade would be richer and more populous than those which did not.¹¹⁰ He reasoned, much as did the physiocrats, that free trade in grain was favorable to agriculture in countries such as France,¹¹¹ but he did not consider or seek to refute the arguments of those who said that such trade was unfavorable to population growth. In his discussion of "luxe," however, he reasoned, as did Cantillon whom he cites, that when France exchanged landed products for lace it exchanged subsistence for labor and tended to diminish its population; yet he disapproved of the exportation of subsistence only on condition that it actually tended to depeople a country or to prevent its population from growing.¹¹² He indicated, too, that a country such as Holland could engage in commerce and exchange shipping and other services for food, but implied that such traffic was a precarious source of income.¹¹³

Like Cantillon, Condillac believed that population adjusted itself to resources and living standards chiefly through changes in nuptiality. Whatever his occupational class, each man wished to "support his family in the comfort which custom makes a need to all those of his state." If he did not see the prospect of doing this, he would not marry, or he would defer marriage until he could achieve this level. In the former situation he would rear no children, in the latter only a few. Condillac implied nonetheless that the pressure to marry and procreate was great. Some married "without thinking of the future," only to suffer the misery that deters others from doing likewise and to

¹⁰⁹ *Ibid.*, pp. 254-60. If surrounding areas are peopled, war will result from population pressure and destroy the surplus population (*ibid.*, p. 260).

¹¹⁰ *Ibid.*, p. 317.

¹¹¹ *Ibid.*, Part II, chaps. ii, xi-xvii.

¹¹² *Ibid.*, pp. 281-83. He writes: "It may be advantageous for Europe to send to the Indies the superabundance of its productions. But, if it has a superabundance only because it is depopled, it would do better to employ its land for the subsistence of its own inhabitants, and to augment its productions in order to augment its population" (*ibid.*, p. 282).

¹¹³ *Ibid.*, pp. 295-97.

see their children "perish from lack of subsistence." The married tended to procreate.¹¹⁴ He did not discuss the curtailment of family size within the married state.

*Condillac's treatment of wage determination was not consistent throughout in all respects. True, he always maintained that the wage of each class of labor is fixed "by competition alone" and is not susceptible to control by the sovereign; that wages are higher or lower according as the relative number of workers is small or large.¹¹⁵ Yet since he supposed man to be almost infinitely plastic and his scale of life to be quite expansible, he implied that man was capable of escaping the pressure of primitive biological drives and that, in consequence, his wage did not necessarily tend to be reduced by competition to a bare subsistence level. Nonetheless, in several places he remarked that the wages of workers of little skill tended to be pushed to the subsistence level by competition. In his discussion of the incidence of taxation, for example, he observed that society consisted of two classes: the proprietors, and the propertyless workers who lived solely upon the earnings of their labor; of these two groups, only the proprietors received incomes large enough to permit them to pay taxes to the state. The worker could pay no taxes because his "wage, reduced to the very lowest by competition, is only exactly that which is necessary to enable him to subsist."¹¹⁶ The "greater number" of workers earned only enough on which "to subsist and to support their family" and could not further curtail their expenditures to pay taxes directly or indirectly.¹¹⁷ Presumably, were workers in this situation taxed, their number would be reduced by misery.¹¹⁸ Elsewhere he observed that wages "always proportion themselves to the permanent price of

¹¹⁴ *Ibid.*, pp. 254, 259. "It is a matter of fact that men multiply all the time that fathers are assured of the subsistence of their infants" (*ibid.*, p. 254).

¹¹⁵ E.g., *ibid.*, pp. 69-71, 93, 291-92, 465. In his distributive theory, Condillac looked upon the proprietor, the entrepreneur, and the worker as co-operating producers, as "coproprietors of the wealth of society." Each shared in the product, the proprietor receiving relatively the largest amount. Condillac treated the incomes of both the entrepreneur and the worker as wage incomes determined in the same manner (*ibid.*, pp. 68-71, 92-93, 98-100, 172-73, 324).

¹¹⁶ *Ibid.*, pp. 291-92.

¹¹⁷ *Ibid.*, p. 399.

¹¹⁸ Such is the implication of his remark that a diminution in consumption and production begets a diminution in population (*ibid.*, pp. 84-85, 387, 392-93).

grain" when commerce in grain is free;¹¹⁹ but he did not mean to imply that in these circumstances wages would just purchase subsistence. On the contrary: when commerce in grain was free and in consequence the price of grain remained nearly constant, the demand for labor was greater and real wages exceeded subsistence; for then cultivators and employers could more accurately estimate expenses and markets and at no greater risk to themselves offer more employment. When, however, grain prices fluctuated appreciably, there was more uncertainty and the average level of wages was lower.¹²⁰ He thus seems to have assumed that so long as grain prices fluctuated a great deal, unskilled workers would earn little, if anything, more than bare subsistence for themselves and their families; but that if grain prices were constant, the average amount of employment would increase and the real wages of unskilled workers would tend to exceed mere subsistence, at least temporarily.

In other discussions of wage formation, however, Condillac did not subscribe to a subsistence wage theory for all or even for most workers. As has already been noted, he admitted that living standards might be high or low, and that they tended to rise in certain situations.¹²¹ In his treatment of differences in wages by occupation he said that the remuneration of any one class of workers was conditioned by their supply and by the demand

¹¹⁹ *Ibid.*, p. 326. Condillac considered the price of grain to be the best measure of value, inasmuch as the ratio of the supply to the demand for grain always remained the same because of the constant adjustment of supply to demand. Apparently, he assumed the cost of grain to be constant (*ibid.*, pp. 238-39).

¹²⁰ *Ibid.*, Part I, chap. xx. When the price of grain fell sharply, money wage rates did not adjust at once, and workers, finding themselves able to earn a living in less time, curtailed the supply of labor; wherefore money wage rates rose temporarily. When the price of grain rose sharply, the effects were opposite in character. In the longer run, however, wages proportioned themselves to the price of grain (*ibid.*).

¹²¹ "It is natural that merchants and artisans who imitate the proprietors," consume more, and enjoy the "commodities that usage introduces." Those who live from day to day and earn little "to ameliorate their condition" (i.e., small merchants, artisans, and husbandmen) change "least sensibly their manner of living." Nevertheless, each strives to enjoy the same commodities as others in his class, and each obtains gradually and "insensibly" greater wages and in consequence enlarges his consumption (*ibid.*, pp. 256-57). Condillac reasoned also, as did Cantillon, that an increase in the supply of hard money would push up prices, wages, and the scale of living in the short run. In the longer run, however, since the rise in prices tended to curtail domestic consumption and production and to cause purchases to be made abroad, unemployment, misery, and depopulation tended to develop as the result of the increase in the money supply (*ibid.*, pp. 413-17).

which depended in turn upon the effective wants of other classes; and that, whatever the market situation, the number of workers in each occupation tended to proportion itself (in part, through interoccupational transfer) to the demand for their services. The wage level at which the number of artisans in given trades was correctly adjusted to demand was higher in proportion as the trade in question required intelligence, expertness, rare talents, extensive training, care, etc., on the part of its practitioners; for these requirements served to limit the number of workers competing in given trades.¹²² In his discussion of factors governing the incomes of merchants he implied that their relative number remained intact only when they could earn enough to obtain the "pleasures that usage permits" themselves and family, to protect themselves against accidents, "and to ameliorate, if possible, their state."¹²³ He implied also that the productivity of the worker determined both his standard of living and his wage, for he indicated that the consumption of the wage earner was fixed by the amount of wages he received, and that this amount was greater when the worker put forth greater effort.¹²⁴ Thus, while he presented a theory in which wages were made to depend chiefly upon either subsistence needs, or a supra-subsistence standard of life acquired through imitation of higher income classes or through the fortuitous enjoyment of temporarily higher wages and consumption, he did not overlook the operation of the scarcity factor as such or its eventual influence upon consumption habits.

Condillac specifically considered whether or not population is an index of prosperity, whether it was more desirable to have a smaller population and a higher scale of living than a larger population and a lower scale of living.¹²⁵ His discussion indi-

¹²² "Dans les plus faciles on a plus de concurrens, et on est réduit à de moindres salaires" (*ibid.*, p. 84; also pp. 69-71, 83-86). Market fluctuations, he showed elsewhere, reduced some workers, especially in the luxury field, to misery and placed them at the mercy of employers (*ibid.*, pp. 517-19).

¹²³ *Ibid.*, pp. 68-69. The incomes of cultivators were governed by the same factors that determined the incomes of merchants and artisans (*ibid.*, pp. 71-72, 92). Proprietors, who "pay the wages" in a community, comprised the only group receiving an income sufficient to enable them to pay taxes (*ibid.*, p. 294; but see also pp. 84, 92); the members of other classes received only enough to satisfy their familial needs, whether primary or primary plus secondary.

¹²⁴ *Ibid.*, pp. 71, 83-86; also pp. 255-57. ¹²⁵ *Ibid.*, pp. 261-63.

cates that he favored such a population as would be consistent with a simple, satisfaction-inspiring standard of living. He rejected the view that the population trend is an index of the quality of government, merely saying that this factor, acting in conjunction with the standard of consumption, helped to determine the size of the population of a country.¹²⁶ He considered as most conducive to the happiness of a people neither the lowest and coarsest (*grossière*) standard of living, which would permit the largest population, nor the most luxurious (*molle*), which would permit only a much smaller population. He favored instead a simple life (*vie simple*), or standard slightly above the simple, with the proviso that all have employment and at least subsistence, and that there be little inequality. A government was good and a nation prosperous if, at this standard and under these conditions, it contained as large a population as possible, and each person was free to enter any occupation not injurious to others, and to assume the place determined for him by competitive forces.¹²⁷

In consistence with his conception of the optimum scale of existence, Condillac gave a much qualified approval to luxury, which he defined as anything that only a few can enjoy. The consumption of many types of luxury goods, especially of those the taste for which spreads rapidly, was to be condemned; for associated with luxurious consumption one generally found inequality, misery, and beggary for the many. Luxury tended to corrupt the customs, to effeminize the population, and to render unhappy the peasants who could not enjoy luxury in rural areas, and who therefore came to the city to seek it, only to find unemployment and misery; wherefore luxury was a cause of rural depopulation. Moreover, luxury checked population growth when it (luxury) was obtained through the net export of subsistence, or at the expense of war, death from bad climate, and other forms of mortality occasioned by commerce. One could

¹²⁶ *Ibid.*, pp. 260-61.

¹²⁷ The above statement is based on his reasoning on pp. 260-63, 266-75, 286-87. "The simple life," he writes, citing ancient Greece, "alone renders a people rich, powerful and happy" (*ibid.*, p. 286). Elsewhere he stated that everyone must be made to work (*ibid.*, p. 476); that while some economic inequality is inevitable and necessary (*ibid.*, pp. 476, 89-91), extreme inequality is socially undesirable (*ibid.*, pp. 88-89).

approve of forms of luxury unfavorable to population growth only on condition that it could be proved that Europe had "a superabundance of population"—in Condillac's opinion an unlikely condition.¹²⁸ He did approve of the production and consumption of goods which, although neither prime necessities nor factitious products, were essential to life in civil society and facilitated progress in the arts or augmented employment.¹²⁹

IV

Du Buat-Nançay (1732-1787), diplomat and historian, is here included among Cantillon's disciples because of his emphasis upon the standard of living and his treatment of luxury. He differed from Cantillon, however, both in his general philosophy and in his analysis of social problems. Thus he believed that the ruin of France could be averted only through the restoration of a feudal regime.¹³⁰ In his emphasis upon agriculture he resembled Sully and the agrarians; in his notion of a providential natural order and of the net productivity of agriculture, the physiocrats.¹³¹

Population growth, he reasoned in his chief work,¹³² is governed, not merely by the resources and subsistences available or accessible, but also by wants—generally, by wants in relation to resources. Other things equal, the fewer per capita needs, the greater will be a territory's population capacity. If wants per

¹²⁸ *Ibid.*, pp. 273-75, 281-87, 417, 476-77, 528. Condillac advocated freedom of commerce, internal and international, saying that commerce enabled each country to exchange its superabundant goods for scarce goods and thereby become richer and more populous (*ibid.*, pp. 52-60, 317). Moreover, looking upon value as the function of utility (*ibid.*, Part I, chap. i), he concluded that exchange augmented the total value at the disposal of the exchangers who always gave up the less valuable for the more valuable (*ibid.*, Part I, chaps. v-vi, xv). In one place (pp. 86-87) the labor of the merchant is declared "sterile."

¹²⁹ *Ibid.*, pp. 8-10, 61-66. Like Cantillon, he suggested that since one fourth of the population was too old or young to work, and only one fourth could find employment in agriculture and "coarse" production, one half must find employment in occupations created by advances in the arts. He stipulated, however, that the luxuries consumed must be those which actually provided employment (*ibid.*, pp. 270-71, 283-84, 292). Condillac emphasized the importance of advances in the arts more than did Cantillon.

¹³⁰ A. Content, *Les idées économiques et financières du Comte Du Buat-Nançay (1732-1787)* (Poitiers, 1914), pp. 19, 99-100.

¹³¹ *Ibid.*, pp. 59-61, 72, 101-13.

¹³² Comte Louis G. Du Buat-Nançay, *Éléments de la politique ou recherche des vrais principes de l'économie sociale* (6 vols. in 3; London, 1773). This work was composed about 1765-66, according to Content (*op. cit.*, p. 16).

capita increase, population will grow less rapidly than formerly, other things equal, and it may even diminish in number.¹³³ If, however, the wants of a population become more varied and men learn to use food and other resources hitherto ignored, the population capacity of an area will expand, provided that the sum total of per capita wants remains unchanged.¹³⁴

Man's needs, Du Buat-Nançay reasoned, fall into two categories, the primary (i.e., sheer necessities) and the secondary or factitious (i.e., goods that are unnecessary, such as cider, linen, etc.). These secondary needs, though not physiologically essential to man's survival, must be supplied; otherwise, men will emigrate or refuse to multiply. Population growth in an area is thus governed in the last analysis chiefly by the capacity of that area to supply, directly or indirectly, the secondary or factitious needs of the resident population;¹³⁵ it will be retarded by whatever contributes to the development or spread of factitious needs, other things remaining equal.

Having concluded that the augmentation of factitious needs is unfavorable to population growth, Du Buat-Nançay reasoned that the spread of luxury was antithetical to population growth; and that whoever introduced new wants for the purpose of stimulating manufacturing, or sought directly to establish and promote manufactures and commerce, retarded natural increase. For the needs of the people increased in consequence. Moreover, and in this respect he follows Cantillon somewhat, the satisfaction of these new wants involved the displacement of some men from the production of subsistence. Thus when a people exchanged its grain for foreign cloth in the international market, it impoverished itself of men and peopled other lands. When any member of the community employed land to produce superfluities, he prevented the land from being used to satisfy primary wants and subsist the population.¹³⁶ Moreover, since the opulence of some

¹³³ *Éléments*, I, 144-45, 154-57.

¹³⁴ *Ibid.*, pp. 148-53. The argument here is similar to that of T. N. Carver (*The Economy of Human Energy*, New York, 1924, esp. pp. 45-52) and George Tucker (see my "Population Prediction in Nineteenth Century America," *American Sociological Review*, I, 1936, 914-15).

¹³⁵ *Ibid.*, I, 211-222. Condillac (*Commerce*, p. 7) used a similar classification: "besoins naturels et besoins factices."

¹³⁶ *Ibid.*, I, chap. xvii, also pp. 235-37, 242; see also II, 293-301, and VI, 71.

entailed poverty and discomfort for others, multiplication by the latter was beset with difficulty.¹³⁷

To the argument that manufacturing and commerce and the production and consumption of luxuries were necessary to prevent mendicity and to provide employment and subsistence for part of the population, he made several answers. So long as customs were simple, government was inexpensive, and the life of the people was fairly austere, there would be little exchange, and nearly everyone could find employment and support in agriculture.¹³⁸ Not until it had become impossible to employ any more men in agriculture and in the satisfaction of primary needs was it advisable to provide employment in manufacturing, commerce, and luxury trades. Even so, the luxury trades offered only a precarious source of income; they were "only to be tolerated," not promoted.¹³⁹

Among the checks to population growth Du Buat-Nançay included emigration, deferment or avoidance of marriage, restriction of fertility within marriage, high rates of infant and adult mortality traceable to misery and poverty, and war, whose cause often was competition for goods to satisfy primary needs.¹⁴⁰ Of these checks the most important were those of a voluntary and preventive nature: avoidance of marriage and restriction of fertility. These preventive checks became operative when the normally strong desire to reproduce¹⁴¹ was more than counter-

Agriculture is defined as the basis of society, its perfection as the production of the greatest net product at the lowest cost (*ibid.*, VI, 61-84).

¹³⁷ *Ibid.*, I, 242. Despite his observation that inequality in income and consequent luxury check population growth, and his contention that men are born equal and have an equal right to happiness (I, Bks. I and II), he does not condemn primogeniture as a check to population, but defends the right of the eldest on nondemographic grounds (III, 387-94). Cantillon (*Essai*, p. 79) implied that primogeniture checked population growth by checking marriage on the part of the disadvantaged children.

¹³⁸ *Éléments*, I, 236, 246-47, 251-54.

¹³⁹ *Ibid.*, II, 414; VI, 71-73; also I, chap. xix. Wallace had said that not until "the earth was entirely cultivated" was it advisable to employ men in manufacturing and the luxury trades (*Dissertation historique et politique sur la population des anciens temps*, Amsterdam, 1769, Maxim No. 5, pp. 24 ff.).

¹⁴⁰ *Ibid.*, I, 145, 153, 215-16. Infanticide in China is also mentioned (*ibid.*, VI, 203). Cantillon had remarked that population pressure "forced" the Chinese to practice infanticide (*Essai*, p. 69).

¹⁴¹ He apparently did not consider this desire natural to man, or at least naturally superior to the desire to satisfy wants (*ibid.*, II, 65-67). The desire to reproduce was

balanced by the fear that marriage and procreation would occasion anguish and misery,¹⁴² and when the desire to satisfy needs had become transformed into avidity, into an "excessive love of wealth." When wants multiply and men become avid, thought of future increases, men fear that marriage and children will diminish their capacity to satisfy their own personal wants,¹⁴³ and therefore avoid or defer marriage, or "deceive" nature.¹⁴⁴ He considered the recourse of the state to perpetual *rentes* to be prejudicial to procreation, saying that those who lived on, or dealt in, *rentes* tended to think in terms of expense, income, risk, etc., and therefore to assume a calculating attitude toward marriage.¹⁴⁵

Concerning the determinants of differential fertility, Du Buat-Nançay made several observations. Urban artisans and day laborers were less inclined to marry than rural artisans and day laborers because economic instability, competition, and the desire for luxuries were greater in urban centers, and because rural artisans and laborers had some prospect of becoming proprietors.¹⁴⁶ Small-scale landed proprietors were inclined to marry because each family member could work on the farm, augment its value, and thus contribute to the security of the farmer and his family. Even in this class, however, the desire for super-

stronger among those who married early and among married persons who were not indifferent to each other (*ibid.*, II, 342-43). Apparently he did not consider divorce a cure for indifference, for he did not advocate it, and said that even though a man desired the wife of another, the realization of this desire could not augment the rate of population growth, since the abandoned wife would be neglected (*ibid.*, II, 341).

¹⁴² *Ibid.*, II, 340. Elsewhere he stated that men more than women feel "the need which leads to reproduction" (*ibid.*, IV, 39). He also condemned women for not producing as many children as they could, and for not nursing their children because of fear for health or beauty. Failure to nurse children is harmful to mothers; the use of mercenary wet nurses is unfavorable to the health and education of the child (*ibid.*, IV, 47-50).

¹⁴³ *Ibid.*, II, 64-67. Du Buat-Nançay, who stressed the imitative nature of man, said that men acquire a taste for well-being through example and, having acquired such a taste, desire to pass it on (*ibid.*, pp. 66-67). Elsewhere (I, 317-18) he said that some love of wealth is necessary to inspire enterprise.

¹⁴⁴ He condemned the sin of Onan, but indicated it was not included under the "great disorder" whereby fertility was being curbed (*ibid.*, II, 341-42). See Moheau, above.

¹⁴⁵ *Ibid.*, II, 344-53.

¹⁴⁶ *Ibid.*, II, 355-56. In the nineteenth century it was said that the prospect of proprietorship checked marriage and fertility in the rural population (*France Faces Depopulation*, pp. 153, 162).

fluities could and did check fertility in marriage.¹⁴⁷ Among the comfortable classes (*aisés*), whence the nobility and magistracies were recruited, men did not tend to multiply unless opportunities existed for the children to preserve the level of life enjoyed by the parents,¹⁴⁸ or to elevate this level. Among merchants, manufacturers, and artisans, family size varied inversely with the desire for gain, wealth, or admission into a higher class, the more calculating limiting their families to one or two sons.¹⁴⁹ The nobility married and procreated so long as their children could be provided for, the total prospective consumption of this group being reduced by the fact that about one half of the sons were likely to be killed in war.¹⁵⁰

Unlike Cantillon, Du Buat-Nançay was a populationist in that he explicitly favored, with some qualification, as large a population as could be supported in life and health on a given territory.¹⁵¹ The Creator had made sexual pleasure great to insure reproduction. A society that was numerous was strong and therefore a source of security to its individual members. Fertility of the soil was most effectively developed when there were many hands to work it. Since posterity had the same right to happiness as the living, the latter were no more entitled to seek happiness through denying life to the future generation than through the destruction of living beings.¹⁵² At the same time he implied that population pressure might develop and make necessary migration to colonies,¹⁵³ or an increase in the relative number of religious celibates.¹⁵⁴ He stated, moreover, that it was not incumbent

¹⁴⁷ *Éléments*, II, 357. Fertility in marriage in rural areas was greater when the types of production and occupation were such as to make women and children useful (*ibid.*, pp. 358-59).

¹⁴⁸ *Ibid.*, pp. 361, 363.

¹⁴⁹ *Ibid.*, pp. 363-64.

¹⁵⁰ *Ibid.*, pp. 376-78, 382.

¹⁵¹ *Ibid.*, I, 316; II, 133. Among the other needs of society he placed defense, the organization of society in such a way as to prevent the emigration of its members, the production or acquisition of as much subsistence as possible, and a high reproduction rate (*ibid.*, II, Bk. VI).

¹⁵² *Ibid.*, I, Bk. II, chaps. xii-xiv, pp. 185, 187, 189, 200.

¹⁵³ When, after all the land had been cleared and its cultivation had been improved as much as possible, there still remained a portion of the population that could not be absorbed by agriculture or by superfluous-producing industries, colonization was necessary (*ibid.*, I, 236).

¹⁵⁴ *Ibid.*, II, 414. He considered religious celibacy of less significance as a check to population than men then commonly believed (*ibid.*, II, 380-81, 405).

upon everyone to procreate as many children as possible, and that a minimum level of comfort needed to be preserved.¹⁵⁵

Population growth could be facilitated, he reasoned, by checking the multiplication of wants and by augmenting the resource supply. Let children be taught to be happy on few goods. Let the goods that satisfied primary needs be varied and multiplied as much as possible (e.g., by substituting rocks for wood). Let the factitious wants be supplied as cheaply as possible, preferably through the use of productive factors (e.g., types of land) not suitable for the production of primary needs. Let the factitious goods be imported when obtainable more cheaply abroad.¹⁵⁶

Du Buat-Nançay did not discuss the determinants of wage levels. His treatment of the factors conditioning population growth suggests, however, that he believed wage and income levels to be dependent primarily upon the standard of living. Although he did not suggest the media through which living standards operated to fix wage levels, his treatment of factors controlling population growth suggests that, in his opinion, deferment of marriage and the positive checks were the principal means whereby numbers were adjusted to resources and wage levels.

In a subsequent criticism of Necker's opinions¹⁵⁷ Du Buat-Nançay discussed the nature and growth of luxury,¹⁵⁸ but did

¹⁵⁵ *Ibid.*, I, 189; VI, 69-70. God had made men sociable, and neither sociability nor attainment of state power was compatible with maximum multiplication. One million comfortable men and three million day laborers and artisans constituted "a greater mass of happiness and sociality" than a half million comfortable men and six million day laborers (*ibid.*, VI, 69-70).

¹⁵⁶ *Ibid.*, I, 195, 205-13. He illustrated his argument by assuming a given landed area which could yield food for two million people, but which, if wine were also required by the population, could support only one million. If, starting with the latter condition, apple cider were substituted for wine, and land that sufficed to feed ten thousand persons was used to raise the necessary apples, the population would grow from 1,000,000 to 1,990,000. If, however, an adequate amount of drink could be imported in exchange for the product of a quantity of land smaller than that required to support ten thousand persons, the population could be increased through the establishment of the trade necessary to secure this drink abroad. So with all factitious goods (*ibid.*, I, 215-21; II, 293-94).

¹⁵⁷ *Remarques d'un Français, ou examen impartial du livre de M. Necker sur l'administration des finances de France, pour servir de correctif et de supplement à son ouvrage* (Geneva, 1785).

¹⁵⁸ "The luxury of today," he wrote, "is a bourgeois luxury, of which women are the Legislators"; formerly luxury had assumed the form of horses, clothing, and arms. He associated the growth of luxury and the change in its character with the develop-

not relate his discussion to population problems except to say that if a "gentleman" (i.e., a nobleman) believed that his rate of living would be reduced by marriage or parenthood, he either would not marry, or would curtail the size of his family.¹⁵⁹ He observed, too, that a continual increase of specie was unfavorable to population growth and therefore to the power of the state.¹⁶⁰ He condemned both Necker's proposals for poor relief and the English poor law, not on demographic grounds, but because of the direct and indirect costs involved.¹⁶¹

V

Certain of Cantillon's doctrines cropped up in several works published at the end of the eighteenth century, at a time when Smithianism had not yet completely displaced physiocracy, only to be metamorphosed later into the economic liberalism of J. B. Say and his disciples;¹⁶² they did not again reappear in France

ment of urban life and with the discovery of the New World, whence came specie, many new goods, and opportunities to win fortunes (*ibid.*, pp. 139-40, 144-45).

¹⁵⁹ *Ibid.*, p. 143.

¹⁶⁰ *Ibid.*, pp. 160-62. Financiers in particular were enriched through the increase of specie and were thus enabled to augment their rates of consumption and to raise urban luxury to higher levels (*ibid.*, pp. 144-46, 158-59, 173).

¹⁶¹ Were Necker's scheme for public relief put into effect, Du Buat-Nangay reasoned, wages would rise, unemployment would increase, the cost of public relief would grow, property rights would be endangered, and misery would be augmented (*ibid.*, pp. 149-50, 153-56). In his discussion of taxation the author followed the physiocrats (*ibid.*, chap. ix), but did not relate his taxation theory to the problem of wage determination.

¹⁶² The views of many of the writers who rejected the philosophy, or the doctrines, of the physiocrats are treated in Chapters VIII-IX. Although, as Weulersse (I, 213-41) and E. Allix (*R. H. S.*, V, 1912, 318-23) indicate, the physiocratic doctrines lost their public appeal in the 1770's, their views did not disappear from written economic discussions until the nineteenth century. Some of the physiocratic views, as will be shown, appear in the works of Garnier and Peuchet. M. Grivel, in his articles on "commerce," "économie politique," etc., in the *Dictionnaire d'économie politique* of the *Encyclopédie méthodique*, still presented the physiocratic interpretation. A translation of Adam Smith's *Wealth of Nations*, by Blavet, was published in the *Journal de l'agriculture, des arts et du commerce* in 1779-80, and in book form in 1780-81, 1788, 1790, and 1800 (see Blavet's Preface in the 1800 ed.). Morellet, with whom Peuchet was associated for a time, also made a translation that was not published. Smith's influence is very evident in many economic articles in the *Encyclopédie méthodique*. Smith's views colored the lectures of M. Vandermonde, first economist to lecture in the newly established École Normale in the closing years of the eighteenth century. The supersession of physiocracy by Smithianism has been tersely delineated as follows by R. Maunier (*R. H. S.*, IV, 1911, 263): Garnier's *Abrégé* (see below), published in 1796, was physiocratic on the balance; Peuchet's *Dictionnaire* (see below), four

for nearly a century.¹⁶³ Germain Garnier (1754-1821), author of one work embodying Cantillon's doctrines, drew inspiration directly from Cantillon, but did not cite the latter's *Essai*; Jacques Peuchet (1758-1830) merely followed Garnier.

Garnier's views appear in his *Abrégé*¹⁶⁴ and in his notes to his translation of Smith's *Wealth of Nations*.¹⁶⁵ The *Abrégé* is an amalgamation, at times well integrated, of the views of Smith, the physiocrats, and Cantillon; it contains the theory of immaterial wealth, later popularized by Say, De Tracy, and C. Dunoyer,¹⁶⁶ and perhaps the first formulation of an abstinence theory of interest.¹⁶⁷ In his notes to the 1802 edition of *Recherches* he sought to show that Smith's views were similar to those of the physiocrats; that the physiocratic net product corresponded to Smith's rent; that the "sterile" classes were productive, but not of a "net product"; that landed property and landed proprietors were economically most significant. Although Garnier defended physiocracy with less vigor in the 1822 edition

years later, was equally physiocratic and Smithian; with the appearance of the works of J. B. Say and Sismondi in 1803 Smithianism became ascendant.

As Allix shows (*op. cit.*, pp. 318-23), a number of factors facilitated the triumph of Smithianism over physiocracy. The contempt of some of the philosophes for the doctrines of the "sect" was inherited by their spiritual disciples (e.g., J. B. Say, the idéologues, the editors of the *Décade*). The rising industrial and commercial classes, "sterile" groups according to the physiocrats, found much support for their activities in the work of Smith, despite the latter's frequent emphasis upon agriculture—a support that was to flower fully in Say's writings. Moreover, Smith's views were deemed more favorable to the defense of technological progress and its product, luxury, than were the views of the physiocrats and of moralists, such as Rousseau and Mably. Smith's liberalism was in keeping with that of such nonphysiocrats as Gournay, Turgot, and Condillac; and it was better formulated than that of the physiocrats. Needless to say, the gradual shift to Smithianism involved little change in population doctrines, early nineteenth-century French population theory deriving principally from Malthus and from J. B. Say, who was essentially Malthusian even before he read Malthus.

¹⁶³ See the comments of Landry (*op. cit.*, pp. 374-83) on O. Effertz; also my "French Population Theory Since 1800," *Journal of Political Economy*, XLIV (1936), 761-62; several French writers, however, stressed the influence of the distribution of income on living scales (*ibid.*, pp. 591-92).

¹⁶⁴ *Abrégé élémentaire des principes de l'économie politique* (Paris, 1796).

¹⁶⁵ *Recherches sur la nature et les causes de la richesse des nations* (Paris, 1802, 1822). Garnier's translation, corrected by Blanqui and published by Guillaumin (Paris, 1843), became the standard French translation.

¹⁶⁶ Allix, *op. cit.*, p. 325; also Allix's article on Dunoyer, *R. H. S.*, IV (1911), 125 ff.

¹⁶⁷ Garnier associated profits with the undergoing of "privation" and "risks" (*Abrégé*, p. 35). See Hasbach, "Germain Garnier als erster Aufsteller der Abstinenztheorie," *Schmollers Jahrbuch*, XXIX, Heft 3 (1905), 323-24.

of *Recherches*, he continued to emphasize the basic importance of landed property and the landed proprietors.¹⁶⁸

Society, Garnier said, consisted essentially of two classes, the landed proprietors, and the nonlanded population which obtained subsistence from the former in exchange for labor in the form of goods and services. Those members of society who accumulated claims to wealth, not in the form of land, and those who, as public officials, controlled considerable purchasing power, resembled the landless workers in that their purchasing power and wealth issued ultimately out of the net product of land; they resembled the landowners, however, in the strength of their bargaining position relative to that of the propertyless workers. In short, while (like Cantillon) Garnier looked upon land as the source of material wealth and upon labor as the means of extracting this wealth, he followed the physiocrats in treating the net product of land (i.e., its rent) as the chief ultimate source of the demand for nonagricultural goods and services.¹⁶⁹

Wages tended to approximate the amount of subsistence required for the support and the perpetuation of the worker,¹⁷⁰ Garnier held in general, even though he admitted that some workers usually got more than subsistence,¹⁷¹ and implied that

¹⁶⁸ See Allix's account of Garnier's theories, *R. H. S.*, V (1912), esp. pp. 323-25, 328-29.

¹⁶⁹ *Abrégé*, pp. 14-16, 22-24, 28, 205 ff.; *Richesse* (1802 ed.), V, 267. He did not defend property or the existing class structure in terms of the "natural law" of the physiocrats, however, asserting (*Abrégé*, p. 186) that "les liens de la société reposent sur des passions misérables."

¹⁷⁰ In his discussion of taxation Garnier implicitly supposed the standard of living to be virtually resistant to downward pressure. Landed proprietors, upon having to pay a new tax, tended to augment and better their cultivation sufficiently to make up the loss due to the tax payment (*Abrégé*, pp. 223 ff.; *Richesse*, 1802 ed., V, 438). Workers, subject to the burden of indirect taxes, tended to work harder and increase their earnings sufficiently to offset the tax (*Richesse*, 1802 ed., V, 396 ff.).

¹⁷¹ Like Adam Smith, by whose wage theory he was influenced, Garnier recognized that in some occupations wages tended to remain higher than in others; and that agricultural labor, which required no special capacities, tended to be least well paid. Labor requiring merit, on the contrary, tended to be better paid (*Richesse*, Guillaumin ed., I, 239, n.). Allix (*op. cit.*, pp. 331, 337) summarizes Garnier's views on wage differentials as follows: "Under a regime of liberty, labor, in the same manner as capital, distributes itself among the different employments, in proportion to the demands, the most difficult and the most tedious tasks finding their compensation in the superiority of their reward. . . . [Garnier recognized] that certain workers receive more than necessary to them as subsistence and conserve a disposable balance for exchange, and that with civilization, the consumption of workers is numerically greater and more varied." The physiocrats shared this view in part.

wages usually were high enough to make population growth possible. For when employment expanded and wages rose, workers multiplied, with the result that wages were again depressed to the subsistence level.¹⁷² The amount of subsistence that the worker received tended in the long run to remain constant—so constant, in fact, that exchange value was expressible in terms of grain.¹⁷³ Were the cost of producing subsistence to fall appreciably, the real subsistence wage of labor would remain the same, Garnier's argument implies.¹⁷⁴

Garnier concluded, in light of his analysis, that even though numbers tended to grow as subsistence and employment became available, the population of a country depended upon: (1) the type and abundance of subsistence;¹⁷⁵ (2) the extent to which proprietors desired to exchange the actual (or potential) subsistence under their control for the labor and products of the nonlanded classes; (3) the kinds of tastes, wants, and desires experienced by the landed proprietors.¹⁷⁶ Unless the latter wanted men, or experienced a "multitude of . . . artificial needs . . . which oblige them to have recourse to the services of other classes," landed proprietors would not extend cultivation and

¹⁷² *Abrégé*, p. 32. He expressed a substantially similar view in 1821 (*Richesse*, Guillaumin ed., I, lxxvii, 239 n.): "If the mass of subsistence destined for the labor of others had exceeded the sum of labor that was offered in exchange for subsistence, this superabundant quantity of subsistence would no longer have been produced, the proprietor of the land no longer having any interest in continuing this production. On the other hand, however numerous one is able to suppose the indigent population which offers its labor and its services in exchange for subsistence, it is not able to receive less of it than is necessary for it to subsist, seeing that, through the effect of the laws of nature alone, this population would soon descend to the level of subsistence capable of alimentering it. . . . When the number of workers is less or greater than the demand for labor requires, the law of population expands or contracts the following generation, and proportions this to the quantity that the work can enable to subsist. . . . Therefore, in the natural and permanent order of societies, the quantity of subsistence sufficient to nourish the worker and enable him to reproduce himself in the following generation, will be the veritable price or equivalent of labor." See also *Richesse* (1802 ed.), V, 266-67 n.

¹⁷³ Allix (*op. cit.*, p. 337) formulates Garnier's value theory as follows: "Value du produit = coût de production = prix de x unités de travail = coût de x unités de travail en subsistances = x subsistances = x blé." See *Abrégé*, pp. 55 ff., also *Richesse* (Guillaumin ed.), II, 239-42 n.

¹⁷⁴ *Abrégé*, pp. 55 ff.

¹⁷⁵ "Other things equal, moreover, a country in which the people will live upon rice or potatoes will be more peopled than a country in which they live upon grain, because this latter production furnishes much less food in proportion to the terrain that it occupies" (*Abrégé*, p. 24).

¹⁷⁶ This is my classification of Garnier's determinants of population density.

augment subsistence as much as possible, the net product would be less than it might be, and the population engaged in both agricultural and nonagricultural pursuits would fall below attainable maxima.¹⁷⁷ Like Cantillon, however, Garnier indicated that the amount of subsistence available depended upon the tastes and caprices of the landed proprietors; that in proportion as proprietors demanded horses and other animals, parks, hunting preserves, etc., land would be diverted from the production of subsistence, and the food supply and the capacity of a country to support population would consequently be reduced; and that in proportion as the number of workers employed in satisfying expensive factitious wants of the wealthy minority was large, the number of workers that could engage in producing provisions for the support of the population would be small. Moreover, like the physiocrats, he at times looked with favor only upon such luxurious consumption as constituted a demand for agricultural products and thus stimulated agriculture and the expansion of the net product of land. The manufacture of refined products, he apparently believed, should suffice only to employ the "super-numeraries of agriculture," i.e., those who could be supported by agriculture, but could not find employment therein.¹⁷⁸ He believed in substance that a country should not rely in part upon food imports from abroad, as these were a precarious source of subsistence; nor should it export food, as such exports checked a nation's tendencies to grow and expand.¹⁷⁹

Garnier believed it desirable for a state to contain as large a population as could be conveniently supported, but he specified that this end be achieved through policies in accord with his theories, as described above. Since landed proprietors no longer had an incentive to foster the multiplication of the dependent classes, as in the days of slavery and serfdom, it was essential that they (proprietors) feel the need of the goods and services

¹⁷⁷ *Abrégé*, pp. 16-24, 48-50, 55 ff., 180 ff. The above argument resembles that of Wallace; it appears in E. Gibbon, *The Decline and Fall of the Roman Empire*, 1776 (see J. B. Bury ed., 1900, I, 53-54).

¹⁷⁸ *Abrégé*, pp. 22, 48-50; *Richesse* (1802 ed.), V, 191, 194, 267 ff. Wallace believed likewise.

¹⁷⁹ *Abrégé*, pp. 164-69; *Richesse* (1802 ed.), V, 194. Garnier thus differed somewhat from both Cantillon and Quesnay.

made possible by the progress of civilization. For in proportion as proprietors experienced such needs, they would have a motive to extend cultivation and to augment the supply of subsistence which constituted the demand for the services of the dependent nonproprietary classes; and in proportion as workers' services were demanded, population would grow. Proprietors' needs and effective demands would expand, Garnier reasoned, so long as the state favored the development of luxury production within appropriate limits, and preserved *laissez faire*; for then sufficient effort would be made to develop new goods and spread new wants among the proprietors, and thus motivate the latter to augment their agricultural production and their effective demands for the services of the nonlandowning classes.¹⁸⁰ In short, since the volume of purchasing power, actual and potential, was controlled by the proprietors and therefore did not tend automatically to expand under all conditions, it was essential that conditions favorable to its expansion and to population growth be established.

VI

Peuchet, a statistical compiler rather than a theorist, though familiar with the works of a number of writers, followed Garnier with respect to population theory.¹⁸¹ Having reasoned that the earth is "the source of all wealth," he proceeded to show that population density depended principally upon the manner in which agriculture was carried on.¹⁸² For population capacity and density were governed by the food supply, and the food supply depended upon the efficiency of agriculture, the types of crops

¹⁸⁰ *Abrégé*, pp. 175, 180-85; *Richesse* (1802 ed.), V, 239. In 1821 (Guillaumin ed., I, 424-25; II, 483, 485) he condemned sumptuary laws as checks to industrial expansion; and indicated that "reputed communal properties" in France were not being efficiently used, with the result that population growth was being checked. In his discussion of public debt, Garnier indicated that government borrowing, though generally entailing an unproductive use of funds, augmented the number of consumers with artificial wants (*ibid.*, 1802 ed., V, 438).

¹⁸¹ Peuchet's economic views are set forth most fully in the long introduction to his *Dictionnaire universel de la géographie commerçante* (Paris, 1800). He was the author of many other works. On his ideas and works see R. Maunier, *R. H. S.*, IV (1911), 247-63. Peuchet cites many of the physiocrats, Franklin, Necker, Condillac, Messance, Filangeri, Montesquieu, Smith, and others, but not Garnier, from whom he obviously borrowed most heavily.

¹⁸² *Dictionnaire*, I, Introduction, pp. ccii and cccclxvii. On the importance of agriculture and the relation of manufacturing to agriculture see also *ibid.*, pp. cxxvi, ccv, ccxiv, cccxl, cccxxxvi.

raised, and the uses to which the land was put. More subsistence was obtainable through agriculture than through herding, and more in a pastoral than in a hunting economy. A given landed area could support more people if sowed in rice or potatoes than if sowed in grain. When a people drank beer rather than wine, the population was less numerous, since the production of beer required more land than the production of wine, and less land remained for food production. When the landed proprietors were idle and voluptuous and set great store by goods from afar and amusements requiring many horses, much land had to be set aside to supply food to draft and pleasure horses and therefore less land remained for the production of subsistence for men.

A cultivated country will be more or less peopled according as the proprietors will direct cultivation more or less toward vegetables appropriate to nourish men, or animals by which they are nourished. . . . Other things equal, according to the extent [and] the fertility of the territory and its cultivation, population will be in proportion to the particular nature of the product which will generally serve for the support of the people. . . . It is by the combination of these different relations between the extent, the fertility of the soil, the state of agriculture and the population, that one is able to explain the prodigious difference which is found in the several states of Europe between the respective population and the extent of their territory.¹⁸³

Like Garnier and Cantillon, Peuchet believed population density to be dependent in large measure upon the will of the landed proprietors. When they were warriors who wanted many followers, and when they were slaveowners or feudal lords who derived advantages from the possession of slaves and serfs, proprietors sought to augment subsistence and population, and numbers grew. When, however, the wants of the proprietors were not such as to compel them to employ many workers, they did not use their land in ways conducive to population growth.¹⁸⁴ When a considerable number of persons were without land and dependent upon wages for subsistence, they would earn a living and increase in number only on condition that the artificial wants of the landed proprietors (or "the rich") were such as to compel the latter to employ the landless workers. "It is therefore in the

¹⁸³ *Ibid.*, p. cciii.

¹⁸⁴ *Ibid.*, pp. cciii, cccclvi.

sensuality and the vanity of the rich, in the innumerable wants that these two miserable passions create in them, that it is necessary to seek the principle of population and of the power of modern peoples."¹⁸⁵

Peuchet did not believe population growth to be wholly dependent upon the will of the proprietors, however. In one place he implied that population density tends to vary inversely with the scale of consumption.¹⁸⁶ He indicated that while population tends to grow where agriculture and commerce flourish and the laws are good and men are happy, numbers and reproduction sometimes tend to be high in countries where these conditions are not met with (e.g., China, India, the German states).¹⁸⁷ In his discussion of the Hume-Wallace controversy over the alleged depopulation of Europe, Peuchet argued that it was inferable that improvement in the social and economic condition of Europe had been accompanied by an increase in population.¹⁸⁸ In his treatment of population growth in America, Peuchet, following Franklin, attributed the high rate of increase to the high marriage rate made possible by the ease with which subsistence could be won. In old countries, such as Europe, on the contrary, wealthy men, fearing the expense entailed by the "luxury of women," married late. Those without wealth remained celibate. "Masters have few children; domestics have none; and artisans fear to have them." In the cities deaths exceeded births, rural natural increase serving to keep up urban populations. Even in rural areas where all the land was occupied and cultivated as well as possible and where the propertyless had to subsist on wages, "the lowness of their gain deprived them of the desire, the hope and the means of reproducing themselves through marriage. Such is the actual state of Europe."¹⁸⁹

Peuchet subscribed only in a minor measure to mercantilistic demographic tenets. He listed population among the riches of a

¹⁸⁵ *Ibid.*, p. cccclvi. Peuchet several times uses "the rich" synonymously with landed proprietors.

¹⁸⁶ *Ibid.*, p. cciii; but see his subsistence wage theory below.

¹⁸⁷ *Ibid.*, pp. cccxlii ff.

¹⁸⁸ *Ibid.*, pp. cccxli ff. An advocate of census-taking, Peuchet remarked that one needed precise statistical information to settle such controversies.

¹⁸⁹ *Ibid.*, p. 325. Elsewhere (p. ccccliv) he wrote that colonies may "always" be regarded "as the effect of an abundant population."

state¹⁹⁰ and looked upon population as an index of a nation's wealth and prosperity.¹⁹¹ He stated that "philosophy" and "la politique" agreed that "the end to have in view is to support the greatest number of men that the country can enable to subsist in a proper manner."¹⁹² But he looked with extreme disfavor upon all economic systems which, though conducive to population growth, secured such growth at the expense of human "dignity and happiness," as did the systems of slavery and feudalism. Population not only could grow, but could grow in consistence with the requirement of dignity and happiness, Peuchet's argument suggests, just so long as the government left "the most complete liberty to consumption and industry." Then only could effective steps be taken (presumably by entrepreneurs) to direct the efforts and resources of industry to the creation and multiplication of the artificial wants of proprietors and "the rich," and thereby provide employment for the landless workers.¹⁹³

Peuchet expressed a supply and demand theory of wages with respect to all types of labor: "Wages, in general, will be more or less high according as work will be more or less demanded. . . . The wages of a particular kind of labor will be more or less high according as the product of this kind of labor will be more or less demanded."¹⁹⁴ He emphasized the demand side, however, and failed to reason, as did some of his contemporaries, including Smith, that differences in the rarity of talent, etc., of workers were responsible for wage differences. Perhaps he took this for

¹⁹⁰ *Ibid.*, p. xlii.

¹⁹¹ *Ibid.*, pp. ccccxli, ccccxlii ff.

¹⁹² *Ibid.*, p. ccccxli.

¹⁹³ *Ibid.*, pp. ccccxli, ccccxliii. Peuchet rejected the mercantilistic balance of trade arguments and failed to mention Cantillon's suggestion that a state could augment its population through the exchange of goods embodying labor for foreign food products (*ibid.*, pp. ccccxlii-cccxli, ccccxlii ff.). Peuchet's treatment of population (*ibid.*, pp. ccccxlii-cccxliii) is identical with that in "Population," *Encyclopédie méthodique*, sec. on Économie politique et diplomatique (Paris, 1788), III, 668-70. In the part of this article dealing with "means to support and augment population in a state" (*ibid.*, pp. 671-72) and not included in Peuchet's *Dictionnaire*, it is said that "the true power of the state consists in the multitude of the inhabitants"; that polygamy, religious persecution, and debauchery are unfavorable to the health and growth of the population; that her colonies helped to depeople Spain; that only good immigrants should be drawn from abroad. Divorce is approved on grounds of sterility, infidelity, and incompatibility. Concerning the statements of those who fear that a country can become too peopled for its agriculture and industry the writer says: "All these reasonings based upon inexact facts do not merit reply." See also a summary of "Depopulation," Chapter VI, below.

¹⁹⁴ *Dictionnaire*, Introduction, I, cccxli.

granted.¹⁹⁵ Commoner forms of labor at least tended to earn only their subsistence, Peuchet said. "Men multiply in proportion to the means of subsistence, and the number of workers multiplying in proportion as demands are made for their work, it results that wages always tend to be reduced to the price of the simple subsistence of the worker."¹⁹⁶

VII

The case for luxury in the second half of the eighteenth century, already well presented by Melon, Montesquieu, Voltaire, and others, was typically formulated by J. F. de Saint-Lambert, friend of D'Holbach, and by G. M. Butel-Dumont. Defining luxury as the usage of "wealth and industry to procure an agreeable existence," Saint-Lambert qualified his defense of *luxe* only by insisting that luxury favor the use of domestic rather than of foreign resources, and that the passions giving rise to luxury be kept subordinate to the spirit of the community.¹⁹⁷ To the charge that luxury is a depopulator he replied that population had grown appreciably in England, where luxury had developed, and had not grown in luxuryless Sicily.¹⁹⁸ The passions which spurred men to want and use luxury, together with the prospect they enjoyed of earning luxury, stimulated industry and the arts, the development of which must "give to the people new means of subsistence, & must consequently 'augment the population.'"¹⁹⁹ Where luxury prevailed, and the opulent spent freely, and where therefore manufacturing and agriculture flourished, men were able to obtain employment and to multiply. He attributed to bad government and similar factors such moral, economic, and demographic decay (e.g., in the ancient world) as the critics of luxury traced to it.²⁰⁰ In short, *luxe*, ordained by man's nature, conduced to economic progress and to the increase of man's numbers and scale of living.

¹⁹⁵ *Ibid.*, p. cccxlvii, where he states that those possessed of rarer talents and capacities usually tend to work for themselves rather than for ordinary employers.

¹⁹⁶ *Ibid.*, p. cccxlv. Later (p. 325) he states that the "competition" of rural laborers, "which is born of the multitude of workers, keeps their work at a low price." The article, "travail," in the *Encyclopédie méthodique*, *loc. cit.*, IV, 552-67, is taken verbatim from Smith's *Wealth of Nations*, Bk. I, chaps. i-iii, viii.

¹⁹⁷ *Essai sur le luxe* (Paris, 1764), pp. 1, 23-24, 29, 61, 71-73. This essay first appeared in Diderot's *Encyclopédie*.

¹⁹⁸ *Ibid.*, pp. 2-3, 7, 25.

¹⁹⁹ *Ibid.*, pp. 24-25, 71.

²⁰⁰ *Ibid.*, pp. 26-28, 30-34.

Butel-Dumont (1725-?) defended individual luxury, but not that supported by governmental borrowing and taxation; the latter he deemed unfavorable to economic progress.²⁰¹ Individual luxury was necessary and good. Luxury and the prospect of luxurious consumption animated men to work harder, to improve industry and the arts, and to multiply employments; wherefore wage and income levels rose, and the happiness of men, a function of the volume of their enjoyments, increased. The strength of the state, dependent upon the number, quality, and well-being of the population, expanded in consequence; for more persons could be employed and supported in comfort where luxury prevailed.²⁰²

Implying that luxury comprehended both *laissez faire* in production and consumption and a willingness to adopt better methods of production, Butel-Dumont contended that luxury is favorable to population growth. Man's desire for goods, together with his passion to emulate his betters, drives him to work hard and sometimes with ingenuity so long as industry is unfettered and he remains free to satisfy both his old and his new wants. Then employments multiply and expand, population capacity increases, and the nation grows in number, felicity, opulence, and power. When, on the contrary, industry is fettered and man cannot consume freely, production falls off and numbers decline.²⁰³

To the charge that luxury depopulates, he replied that population was greater in states where luxury prevailed than in areas where luxury was not known; that population capacity was greatest where luxury production was carried on.²⁰⁴ To the charge that luxury conduced to celibacy, he replied that a celibate supported, by his expenditures, the same number of people, whether he was married or single.²⁰⁵ To Cantillon's charge that luxurious consumption diverted resources from the production of subsistence, Butel-Dumont replied that expenditures of this sort were relatively unimportant; and that the state could suppress this

²⁰¹ *Théorie du luxe* (London, 1775), I, 41, 180-81; II, 85. Voltaire, Melon, Saint-Lambert, and other defenders of luxury are cited.

²⁰² *Ibid.*, I, 5-6, 18, 70-104, 151, 158-59, 178-83; II, 170-72. As the arts advanced, he said, what had been a luxury tended to become a necessity (*ibid.*, I, 121, 137).

²⁰³ *Ibid.*, I, 38-41, 50-55; II, 118-19, 172.

²⁰⁴ *Ibid.*, II, 58-59, 61-62.

²⁰⁵ *Ibid.*, II, 59-60.

type of luxury only on condition that it suppressed other types which supported and animated men. "The number of men in a country is always in proportion to the quantity of products that this country furnishes for the usage of man."²⁰⁶ To the physiocrats he replied that widely demanded decorative luxuries gave rise to the greatest amount of landed revenue, and that men were attracted to countries where a considerable number could enjoy luxury.²⁰⁷ Luxury, he replied to all its critics, threatened man with population pressure rather than with depopulation, so favorable was it to population growth.

If one has something to fear from luxury, it is that it brings on an enormous population: necessary effect of its influence when skillful management is not opposed to it. The destiny of sublunary things is to perish through the causes of their progress. The sources of the prosperity of a State corrupt it in the end, when a prudent administration does not direct it and manage its course. The emulation produced by luxury and by the security of property begets a prodigious abundance, and this abundance begets a yet more prodigious population. If no measure is taken to prevent the excess of this population, it becomes a plague.²⁰⁸

Although Butel-Dumont did not conceive of an optimum density of population, he noted the dangers of population pressure. When a country was overpopulated, as was China, men were animated only by the struggle for subsistence; they were no longer inspired by the desire for well-being and in consequence lost the capacity to progress. Fortunately, he observed, Europe was far from being overpopulated, and remedies to temper excess propagation could probably be found if economic progress failed.²⁰⁹ Governments, he suggested, should seek to multiply the satisfactions of their citizens.²¹⁰ Presumably he considered the governments of great states most suited to achieve this end, for he observed that large states were preferable to small states, inasmuch as they were more powerful and stable and, since they contained a greater number and variety of minds, more progressive.²¹¹

²⁰⁶ *Ibid.*, II, 60-61.

²⁰⁷ *Ibid.*, I, 172-78; also II, 25-39, 77-202, where physiocrats and other definitions of luxury are criticized.

²⁰⁸ *Ibid.*, II, 62-63.

²⁰⁹ *Ibid.*, II, 63-65.

²¹⁰ *Ibid.*, I, 72-104.

²¹¹ *Ibid.*, I, 18, 24-25.

VIII

The views of Senac de Meilhan (1736-1803), an intendant, and Abbé Pluquet (1716-1790), professor of morals and history at the College Royal, typify the late eighteenth-century attack upon luxury.²¹² De Meilhan believed population to be one of the pillars of the state.²¹³ Positing the question: Is it desirable that population increase when already many are unemployed and in misery?, he replied in the affirmative, saying that population growth animates economic activity and thus contributes to the relief of unemployment and misery.

When poverty depresses a great number of men the means appropriate to relieve the indigents & those which tend to multiply the human species, are the same. If there is a country where today a million miserable [beings] exist, without property, without means of work, & here in twenty years the population increases by one million, it is incontestable that industry, commerce, will have become more animated, that these causes will have spread their influence to the actual classes of indigents who will have obtained more work, & the means of subsisting more easily & more numerous. It is these same indigents who, enjoying a happier lot, no longer fearing marriage and fecundity, will be the authors of new [family] lines.

It is evident that the population of a country could not augment, if the principle of misery which afflicts actual stocks, existed. The number of men is not able to increase without that the means of work be augmented, & that in consequence the means of subsistence become more abundant.²¹⁴

²¹² Luxury was usually attacked on the ground that marked inequality and misery were associated with it, and that it resulted in moral decay, effeminacy, and idleness. The critics of luxury generally believed that a moderate but not a great income for each citizen constituted the most preferable state. See the works dealing with luxury and welfare, discussed by Lichtenberger, *op. cit.*, pp. 392-96, 400-406. In *Le luxe considéré relativement à la population et à l'économie* (Lyon, 1762), M. Auffray described luxury as a depopulator, saying that luxury conducted to celibacy, to bad customs, and to the ruin of industry. I. de Pinto also criticized luxury in his *Essai sur le luxe* (1764).

²¹³ "The sole durable strength of the state consists in tillage & a numerous population." See *Considérations sur les richesses et le luxe* [1787] (Amsterdam, 1789), p. 429. In a later work De Meilhan stated that the growth of wealth in France under Louis XVI had dissolved the social barriers and contributed to the breakdown of the French class system. See *Du gouvernement, des mœurs et des conditions en France avant la révolution* [1795] (Paris, 1814), chap. iii.

²¹⁴ *Considérations*, pp. 33-34. Unlike modern investment theorists, De Meilhan did not explain *how* population growth could energize an economy.

De Meilhan implied, however, that population growth is dependent upon, and ultimately limited by, subsistence, even though the above quotation suggests that he looked upon demographic expansion as an employment- and subsistence-creating factor. Limitation of numbers had been found necessary in the ancient Greek city states, and in primitive communities, because their landed areas and resources had proved limited.²¹⁵ As a result, certain checks to population growth had been sanctioned, or employed;²¹⁶ and the ancient Greek states had sent out their surpluses as colonies.²¹⁷ In support of his view that Europe and the world were more peopled then than formerly, he pointed to modern improvements in tillage, criticized the high estimates of ancient populations, and asserted that slavery and servitude (which formerly had been more common) were unfavorable to both tillage and natural increase.²¹⁸ He mentioned as checks to population growth the cost of supporting large standing armies,²¹⁹ and, in France, the means employed to recruit the militia.²²⁰

Luxury, De Meilhan's discussion suggests, checked population growth in three ways: (1) it restricted the provision supply; (2) it made for celibacy; (3) it entailed misery for the masses.²²¹ Starting with a community in which 80 per cent of the workers were engaged in agriculture, De Meilhan reasoned that if any

²¹⁵ *Ibid.*, pp. 23, 25.

²¹⁶ He mentions the exposition of children, abortion, infanticide, castration (*ibid.*, pp. 24-25, 33).

²¹⁷ *Ibid.*, pp. 24, 29, 411. Modern colonies were established for commercial purposes (*ibid.*, p. 411).

²¹⁸ *Ibid.*, pp. 26-33. Population growth, being "an effect of liberty," proceeds rapidly only in republics (*ibid.*, pp. 29-30). He predicted that since Negro slavery was unfavorable to population growth in both Africa and the New World, the price of slaves would become so high that white labor would replace them in America, and that, in consequence, colonial commerce would no longer be very profitable to the mother country (*ibid.*, pp. 427-28). A somewhat similar argument was developed in the United States by O. Ellsworth and others (*J. P. E.*, XLI, 1933, 649-53).

²¹⁹ Modern armies were much larger and relatively more expensive than ancient armies (*op. cit.*, pp. 70-71). Large armies, together with luxury, depopled empires, which "resemble parks that grow only at the expense of population" (*ibid.*, pp. 29-30). England had an advantage over France, in that England relied on a navy and did not support a great standing army to the prejudice of her agriculture (*ibid.*, p. 483).

²²⁰ *Ibid.*, chap. xlii. Here his argument is implicit. He proposes that the French standing army be reduced, and that the method of recruiting militia be reformed.

²²¹ Luxury, from the individual point of view, consisted in living beyond one's means; from the state point of view, in "the sterile employment of men and materials" (*ibid.*, pp. 114-15).

of these abandoned agriculture for nonagricultural trades, the "territorial product" would diminish, and the "population . . . decrease in proportion"; that if the quantity of foodstuffs which nonagriculturalists could command were increased, the supply available for the masses, and hence their number, would decrease.²²² In short, where luxury prevailed, a few lived well, tillage and capacity to support population diminished, the misery of the masses increased, and numbers declined;²²³ moreover, many tended to remain celibate, or not to procreate, even though not poverty-ridden.²²⁴

Although De Meilhan did not formulate a theory of wages, he did suggest that the level of wages was influenced by both the cost of grain and the vulnerability of the working class to exploitation. "The price of grain in a nation is closely connected with that of wages," the latter generally moving in the same direction and degree as the former.²²⁵ Real wages did not necessarily remain constant, however; they had been higher in the time of Francis I because then the competition to buy grain had been less keen, the demand for labor great, wealth more evenly distributed, and taxes low. "Consequently there was less misery, & the laborer was not forced by need to accept as promptly the imperious law of the wealthy."²²⁶ Where luxury and the conditions giving rise to luxury²²⁷ prevailed, the masses were far more dependent upon the wealthy few who took advantage of the situation to pay lower wages.

The misery and low pay of laborers employed on useful works is the effect and not the principle of luxury. The more inequality of fortunes

²²² *Ibid.*, pp. 118-20, 123-24. De Meilhan's reasoning apparently was influenced by both the physiocrats and Cantillon, but he refers to neither.

²²³ *Ibid.*, pp. 122, 124, 158, 166.

²²⁴ *Ibid.*, pp. 114-16; also pp. 527-28, where he traces celibacy in part to the use of *rentes viagères*, recourse to which by the state he associated with the prevalence of luxury.

²²⁵ *Ibid.*, pp. 275-76.

²²⁶ *Ibid.*, p. 279.

²²⁷ Inequality, sudden increases in the supply of money or credit (he refers to Law's system and to the influx of precious metals from the New World), concentration of wealth, prodigality on part of the ruling class, and so on, gave rise to luxury and hastened its spread (*ibid.*, pp. 125-28, 131, 141-43, 152, 155-57, 181, 255). Although he believed that increases in the supply of money pushed up the prices of luxuries much more rapidly than that of grain (pp. 276-78), De Meilhan stated that a gradual increase in the supply of money did not sensibly influence luxurious consumption (p. 181).

is increased, the more fortunes are concentrated, & the more the rich imperiously make the law for the poor. Formerly there was less luxury, & wages were higher; the price of subsistence was lower, & the condition of the people consequently was happier.²²⁸

Despite his belief that money wages moved with grain prices, De Meilhan favored free international trade in grain. Ordinarily, he believed, France had a surplus for export. Moreover, while foreign buying would tend to elevate the price of grain, the increase would be slight, for cultivation would flourish and be extended. The profit-seeking activity of merchants would prevent the development of a grain shortage. Of the effect of free trade in grain upon wage levels as such he said nothing, merely observing that the resultant agricultural prosperity would favor population growth.²²⁹

No eighteenth-century French attack upon luxury exceeded in comprehensiveness that of the Abbé Pluquet.²³⁰ He defined *luxure* as the use of objects which produce 'sensations agreeable to man and considered necessary by him, and which, in light of the laws of nature, are not actually essential to his life, health, and happiness, and may even be harmful.'²³¹ Pluquet declared luxury to be inimical to the power of the state²³² because: (1)

²²⁸ *Ibid.*, p. 158. Here De Meilhan reasons as did Necker, whose notions as to the origin of inequality are criticized (*ibid.*, pp. 155-57 and 165-66).

²²⁹ *Ibid.*, pp. 274-78, 289-90, 294-95, 298-301. De Meilhan favored governmental action to reduce the interest rate, but otherwise was inclined to accept *laissez faire*. He condemned the mercantilistic "exclusive system" with respect to colonies, saying that it was costly, and that colonies would remain subject to the mother country only so long as they were weak. See *ibid.*, pp. 267, 412-15, 429. He opposed sumptuary laws in large states, saying they throttled the striving for wealth (*ibid.*, p. 319).

²³⁰ *Traité philosophique et politique sur le luxe* (Paris, 1786). In Volume I the author delineated the evil effects of luxury upon man as an individual, and upon his arts and morals; in Volume II he showed, through analysis and through appeal to history, how luxury undermined collective political and social life and destroyed states, and how luxury might be extinguished. Pluquet, who was greatly influenced by Cantillon and Petty, was familiar with both Graeco-Roman views on luxury and those of his contemporaries. Among the defenders of luxury whose views he criticized are Mandeville, Melon, Montesquieu, Hume, Condillac, D'Holbach, and others.

²³¹ *Traité*, I, 79. Elsewhere (*ibid.*, II, 48), he stated that luxury is contrary to natural law, inasmuch as luxury consumption by the few deprives the majority of the necessary means of subsistence.

²³² "The strength or power of a state depends upon the number of its citizens, their strength, or the goodness of their physical constitution, their attachment to their country, their courage, and their ability to conserve it and defend it. . . . Luxury being contrary to all these causes, it is impossible that it not destroy the strength and power of states" (*ibid.*, II, 321, 382). A million additional population in Bretagne

luxury checked population growth; (2) luxury entailed overconsumption and idleness for some, and deprivation and overwork for others, and thus destroyed some or all of the qualities that make for good citizenship (e.g., health, strength, vigor); (3) luxury undermined the foundations of courage and character, possession of which is prerequisite to the defense of the state by its citizens. Moreover, since luxury was not necessary, as some held, to the prosperity of agriculture and industry, no positive and countervailing defense of luxury was valid.²³³

Reasoning that population growth depended upon both the supply of subsistence and the degree to which men felt themselves impelled to marry and to procreate, and that luxurious consumption was unfavorable to both these determinants, Pluquet concluded that luxury was "contrary to population." "When Luxury dominates in a Nation it is not able to nourish as great a number of citizens, as if it were without Luxury. . . . Luxury destroys in citizens all the motives which lead them to become fathers of a large family."²³⁴

Following Cantillon in large part, Pluquet sought to show first that where the consumption of luxuries was great, the production of subsistence was checked both by the manner in which productive resources were employed, and by the productivity-thwarting misery to which the common man was condemned. Land was used, not to subsist men, but to supply provisions for wild game and unnecessary horses, and to create unproductive parks, gardens, and highways.²³⁵ It was evident, therefore, at least when the population was producing as much subsistence as the land could be made to yield, that the diversion of land from the actual subsisting of men checked population growth.²³⁶ It was evident further that even when land was not diverted from

would benefit France more than all her colonies; three or four million more people would profit France more than the possession of Mexico and Peru (*ibid.*, pp. 485-86).

²³³ The above view permeates all of the *Traité* and is explicitly developed in Part II, sec. ix, in II, 321-82.

²³⁴ *Ibid.*, II, 322-23, 333. Citations hereinafter are from Volume II.

²³⁵ In France, Pluquet estimated, protected wild game alone consumed or destroyed the subsistence of a million men (*ibid.*, p. 325). Horses could depeople a kingdom, he added, quoting Petty to this effect (*ibid.*, p. 327).

²³⁶ *Ibid.*, pp. 323-28. Although Pluquet referred to Cantillon's views on the balance of trade (*ibid.*, pp. 308-21), he did not integrate this theory with his population doctrine.

the production of subsistence, population growth was checked in luxury-consuming countries by the fact that the well-to-do consumed twenty or thirty times as much food per person as did those who lived moderately.²³⁷

Where luxury prevailed, the ruralist was kept enchained in ignorance, and the lot of both the rural and the urban masses was miserable. In country districts workers and cultivators were obliged to labor long and arduously for a bare and often unhealthful subsistence, with the result that they were weak and unable to resist disease. "A great number die in their youth, a greater number in infancy." Of those who, pushed by misery or attracted by hope, migrated to the city,

a part do not marry; those who marry have few children; misery, debauchery, cause a great number to perish, because it is impossible that luxury prevail in a state and in great cities, without there being much libertinage and misery, unwholesome houses, maladies fatal to the greater part of the poor. The misery which reigns in the capital carries off more subjects than the most terrible epidemic.²³⁸

Luxury, Pluquet therefore concluded, is a depopulator in that it checks the production of food and causes maldistribution.

A society is able to nourish a greater number of citizens, according as it draws from its territory a greater quantity of products appropriate for the subsistence of man, according as it employs less of these products for the nourishment and support of each citizen, and as it puts everyone in a state calculated to conserve life and health. . . . When luxury dominates in a state, the government does not procure for the citizens the means of conserving their life. On the other hand, it employs for superfluities that provide agreeable sensations only to the rich an extent of land which could nourish a great quantity of men: luxury therefore is fatal to the population through the bad use that it makes of the soil and its products, and through the misery to which it reduces the greater part of the citizens.²³⁹

Pluquet reasoned, secondly, that luxury operated in various ways to weaken man's inclination to marry and rear a family. Instinct and physical need tended to drive "man to perpetuate himself, as the animals." Conjugal love; the respect, love, and

²³⁷ *Ibid.*, pp. 328-30. Pluquet here refers to Cantillon's observations, made in "nearly all the states of Europe," according to Pluquet (*ibid.*, p. 328 n.).

²³⁸ *Ibid.*, pp. 323, 331-32, also pp. 359-60. ²³⁹ *Ibid.*, pp. 323, 332-33.

admiration of children for their parents; the anticipation of support and protection in old age: "such are the motives through which nature leads man to become the father of a large family." It was these motives that luxury undermined.²⁴⁰ Luxury destroyed "the attachment, friendship, and all the affections which make the union of spouses a source of happiness, continual and independent of sensations."²⁴¹ Where luxury prevailed, and man sought "his happiness in agreeable sensations," he looked upon the coming of each child as the equivalent of a reduction in the sum of his pleasures;²⁴² children tended to lose that filial piety, desire for which induced man to procreate; and men were esteemed by the community, not because they had reared a large family, but in proportion to their capacity to spend and live magnificently, a capacity not consistent with the capacity to maintain large families.²⁴³ Moreover, such children as were born to luxury-loving parents quickly acquired luxurious tastes in the parental home, and bent upon satisfying these tastes, soon came to fear marriage and the burdens of parenthood. Accordingly, where luxury prevailed there were many celibates, and families frequently died out. "Luxury is a species of pit, or abyss, into which families precipitate themselves and are annihilated forever."²⁴⁴

Pluquet observed further that while the "lowest classes of citizens contribute most to the population," their multiplication was checked, in countries where luxury prevailed, by misery and indigence which destroyed the greater part of the children. For parents in these classes earned, even with excessive labor, only a miserable existence.²⁴⁵ "If the unhappy [members] of this class desire to perpetuate themselves, it is only in moments of drunkenness, caused by strong liquors: fathers thus constituted produce only feeble, debilitated infants, whom misery and indigence enfeeble even more than their fathers."²⁴⁶

²⁴⁰ *Ibid.*, pp. 333-35.

²⁴¹ *Ibid.*, p. 336.

²⁴² "The man of luxury is happy in virtue of agreeable sensations; he is obliged to vary them without cessation, and his wealth never suffices for this need: a large family is then a calamity for the man delivered to luxury, because he is obliged to sacrifice for it a part of the objects of his happiness; he sees in his children only enemies that the conjugal union has created, and not friends or subjects that nature has given him" (*ibid.*, p. 338, also p. 337).

²⁴³ *Ibid.*, pp. 338-39.

²⁴⁴ *Ibid.*, pp. 339-40.

²⁴⁵ *Ibid.*, pp. 341-42.

²⁴⁶ *Ibid.*, p. 360.

Pluquet marshaled historical data in support of his general thesis. Man's numbers had increased rapidly when societies were first formed and life was simple. Greece and Rome had not experienced depopulation until luxury had become dominant.²⁴⁷ The growth and spread of luxury were responsible for the decline in the population of France²⁴⁸ and for the fact that England's population was so very small.²⁴⁹

The exploitation of the masses to which luxurious consumption gave rise, Pluquet traced to the mode of life of the proprietors and to excessive taxes for the support of the privileged classes whose mode of life was made possible by the government.²⁵⁰ Were the proprietors to give up luxury, they would demand less rent from the farmers, who, becoming better off in consequence, would pay the worker "a wage sufficient to enable him to live in comfort with his family." The countryside would become peopled with cultivators possessing money, who would continue to multiply and extend cultivation, and who would provide a growing market for clothing, linen, shoes, utensils, and implements. The demand for the labor of artisans would necessarily expand as a result, and their wages would rise. Men everywhere would be happy.²⁵¹ Were the taxes then being imposed to support the luxury-consuming classes reduced, the effect would be the same, for everyone, from proprietor to laborer, would be better off.²⁵² Agriculture, together with the village and town industries that supplied the wants of cultivators, would expand sufficiently to absorb all workers displaced from luxury industries and occupations and provide them with a better living than they had enjoyed in the luxury trades.²⁵³ In brief, then, were luxury abolished, all would be more secure and happy, the state would be stronger in event of war, and the government would be able to accumulate grain reserves against times of dearth.²⁵⁴

²⁴⁷ *Ibid.*, pp. 343-48.

²⁴⁸ *Ibid.*, pp. 349-53. Pluquet concluded, following Villaret, that France in 1328 contained considerably more than twenty-four million inhabitants (*ibid.*, p. 350).

²⁴⁹ *Ibid.*, pp. 354-56. He cites Petty.

²⁵⁰ *Ibid.*, pp. 324, 405, 468.

²⁵¹ *Ibid.*, pp. 467-68.

²⁵² *Ibid.*, pp. 475-76.

²⁵³ *Ibid.*, pp. 472-76. The lot of luxury workers was hard. When employed, they wasted upon superfluities that part of their wages which remained after necessities had been purchased; when old, they were without means (*ibid.*, pp. 473-74).

²⁵⁴ *Ibid.*, pp. 374-75.

CHAPTER V

QUESNAY AND THE PHYSIOCRATS

MEMBERS of the physiocratic school, whose doctrines were ascendant in the third quarter of the eighteenth century, were pre-eminent among French writers who emphasized the basic importance of agriculture, and the need of rehabilitating the French agriculture.¹ Their economic doctrines have been described, on the one hand, as embodying the first unified, closed, and logical system of economic theory,² the first complete doctrine of competition,³ an effective counterblast to mercantilist pecuniary doctrines,⁴ and the eighteenth-century emphasis upon the need to augment production;⁵ on the other hand, as constituting a rationalization, conscious or unconscious, of a set of commercial and fiscal policies especially suited to serve the interests of the rising bureaucratic and bourgeois landowning class.⁶

¹ The leading members of the physiocratic school were its founder, F. Quesnay (1694-1774), V. R. Mirabeau (see Chapter IV), P.-P. Le Mercier de la Rivière (1720-1793), Abbé N. Baudeau (1730-1792), G. F. Le Trosne (1728-1780), and P. S. Du Pont de Nemours (1739-1817). Abbé Morellet (1727-1819), whose works are treated in this chapter, was a disciple of Gournay, and not a full-fledged physiocrat. For Turgot's views see Chapter VII. The main physiocratic works of these writers are: Mirabeau, *Philosophie rurale ou économie générale et politique de l'agriculture, réduite à l'ordre immuable des loix physiques & morales, qui assurent la prospérité des Empires* (Amsterdam, 1763); Mercier de la Rivière, *L'ordre naturel et essentiel des sociétés politiques* (1767); Baudeau, *Première introduction à la philosophie économique; ou analyse des états policés* (1771); Le Trosne, *De l'intérêt social, par rapport à la valeur, à la circulation, à l'industrie et au commerce intérieur et extérieur* (1777); Du Pont, *De l'origine et des progrès d'une science nouvelle* (1768), and *Abrégé des principes de l'économie politique* (1772). Unless otherwise indicated, reference to the above works, other than Mirabeau's *Philosophie*, is to the edition included in E. Daire (ed.), *Physiocrates* (Paris, 1846).

² G. Myrdal, *Das politische Element in der Nationalökonomischen Doktrinbildung* (Berlin, 1932), pp. 49-50; K. Bücher, J. Schumpeter, and F. von Wieser, *Grundriss der Sozialökonomik* (Tübingen, 1914), I, 41 ff.

³ B. Raymond, *R. d. e. p.*, XVII (1903), 770, 774.

⁴ A. Dubois, *R. d. e. p.*, XVIII (1904), 215-16.

⁵ Marc Block, in his treatment of the struggle for agricultural individualism in eighteenth-century France, tries to show that the eighteenth-century emphasis upon production, rather than upon distribution, had its origin in fear of famine (caused by population pressure and war) and in the desire to strengthen the state through an increase in tax revenues from agriculture (*Annales d'histoire économique et sociale*, II, 1930, 329-83, 511-56, esp. pp. 333-34).

⁶ N. J. Ware, *American Economic Review*, XXI (1931), 607-19. Ware concludes (pp. 618-19):

I

Whether or not the physiocrats developed their doctrines to protect the interests of landholding classes,⁷ the physiocratic population doctrines, in especial those of Quesnay,⁸ are understandable only in light of their conception of the nature of production and of the role of agriculture in mid-eighteenth-century France. Of the various possible types of useful and necessary economic activity, the physiocrats held only agriculture and fishing to be capable of yielding a net product, or net return above all operating expenses.⁹ Agriculture, the physiocrats believed, was the primary industry of France and the sole industry on which the

"The physiocratic theory, then, arose out of the special needs of a new landowning class under a bankrupt monarchy and a fiscal system inherited from the past. The problem of these new landowners was to rid themselves of the innumerable taxes of the *ancien régime* which fell of necessity upon the land and made profitable farming impossible. Thus the single fixed tax on the net product of the land and freedom of trade in grain were their basic economic reforms. Out of these and the class interest of the physiocrats came the interpretation of wealth, money and value, and, as an extreme form of class interest, the doctrine of the sterility of trade and industry. Their political theory arose equally out of the landowners' desires for surety and efficiency of land capital and the bureaucrats' allegiance to the monarchy. This political system had a twofold direction against the arbitrariness of the *ancien régime* and equally against the insecurity, as conceived by the landowner, of the new political theories of Montesquieu, Rousseau, and others.

"Reforms having been discovered to secure the property of the landowner and a political theory adumbrated to protect his interests, it was found necessary to catch up the whole in a single system. The Divine Order had succumbed to the skepticism of the century. Bacon and Newton had familiarized men with the physical order. Locke, Hobbes, Rousseau had carried this concept over into social thinking under the terms Natural Order and Natural Law. Thus the Natural Order was for the eighteenth century what evolution became for the nineteenth, the common concept into which every generation was thrown. Finding it necessary to give to their special interest a general form, the physiocrats adopted this major concept of their time, and made Property, Liberty and Surety the Natural Order of the day, until these were supplanted by new shibboleths: Liberty, Equality, and Fraternity."

⁷ While this object played a part in the development of physiocratic doctrine, it was but one of the elements governing the formulation of physiocracy.

⁸ Primary attention will be devoted to Quesnay's views, all of which were fully developed by 1757. Only cursory attention will be given to the views of physiocrats other than Mirabeau, originally a disciple of Cantillon, inasmuch as the other physiocrats followed Quesnay closely in respect to population. The wage theories of the physiocrats are treated in the latter part of this chapter.

⁹ Weulersse, I, 277-80. In 1765, as Commons points out (*Institutional Economics*, New York, 1934, pp. 132-35), Quesnay modified his doctrine of productivity, asserting that the *sterile* classes were sterile in so far as they were relatively too numerous and fabricated relatively more stuff than could be sold to agriculturalists at a favorable price. This modification was without much effect, however, for Quesnay and his followers continued to employ the notion of sterile classes in the sense Quesnay originally gave it.

economy of any large country could be founded;¹⁰ but they were convinced that it was in an exceedingly depressed state and was suffering in particular from a deficiency of capital and from a consequent dearth of labor.¹¹ Quesnay supposed, as Landry infers,¹² that the failure of the relatively high yield on capital invested in agriculture to attract enough capital to reduce this rate to parity with the rate of return obtainable in other industries was due to the lack of access of agriculture to the sources of capital.¹³ Therefore, he favored all conditions (consistent with competition)¹⁴ that tended to reduce the cost of production, especially in agriculture, or to elevate the demand for grain and increase its exchange value (e.g., freedom of trade in grain, in as much as France, in his opinion, produced a surplus; the diversion of the income of the wealthy to the purchase of agricultural products; and the augmentation of the effective demand of the masses for provisions); for the increased sale value of agricultural products would swell the gross and net revenue of agriculture, increase the supply of capital available for investment in agriculture, and thus stimulate its development. In consequence of the increase in the gross and net revenue of agriculture, the demand for nonagricultural products would increase and bring about the very population growth which an agricultural surplus, such as then existed in France, was unable per se to bring about.¹⁵

Quesnay and the physiocrats found it necessary, therefore, to refute the contentions of the populationists who asserted that a population of the greatest possible size¹⁶—the primary prerequisite to the maximization of state power—would be achieved in

¹⁰ See *Œuvres de Quesnay*, ed. A. Oncken (hereinafter cited as Oncken) (Paris, 1888), pp. 220, 233-36, 240, 262-63, 292-94, 333, 343-44, 420-21; also Weulersse, I, 248-55.

¹¹ Oncken, p. 235; Weulersse, I, 316-402; also Baudeau, *Introduction*, pp. 703-04.

¹² R. H. S., II (1909), 42-43, 46-47.

¹³ Oncken, pp. 181-82, 297, 337; Weulersse, I, 379-96.

¹⁴ An exponent of the merits of competition in accordance with the prescripts of natural law, Quesnay (and his disciples) sought for agriculture no protection or differential advantage, but only the chance to flourish under conditions of economic liberty (Weulersse, II, 17-29; Quesnay, Oncken, pp. 359-77).

¹⁵ See Landry, *op. cit.*, pp. 35-47; Weulersse, II, 142-50; also an analysis of Quesnay's theories in the following pages.

¹⁶ The populationists generally insisted, in France as in England, that the population be employed. The physiocrats insisted not only that the population be employed, but that it be properly distributed among various occupations.

proportion as the number of small-scale labor-consuming agricultural properties was increased, grain exports were prohibited, and domestic manufactures were stimulated through preferential treatment by the state. Accordingly, the physiocrats sought to show: (1) that national power flows from other sources than mere numbers, even when the latter are employed; (2) that population growth is conditioned in greater measure by the growth of wealth than the growth of wealth is conditioned by increase in numbers; (3) that growth in national wealth depends upon the expansion of agricultural forms of wealth; (4) that whatever increases the income of agriculture tends to augment both the size and the well-being of the agricultural and nonagricultural branches of the population.¹⁷

The physiocratic argument that state power did not rest primarily upon numbers resolved itself into four separate propositions: (1) that numbers did not form the main sinews of war; (2) that numbers were an effect, not a cause; (3) that since men differed in quality, the usefulness of a population depended in part upon its quality; (4) that national power was limited by the institutional structure of society, inasmuch as the efficiency with which resources were used was conditioned by that institutional structure. The physiocratic argument was indirectly strengthened, furthermore, by the school's rejection of the view that war is the natural state of men and nations, and by their corollary supposition that observance of the laws of the natural order results in peace and international interdependence.¹⁸

In support of the first proposition, the physiocrats urged that "revenues," and not "the pecuniary mass" or numbers, constituted the source of "the power of states" and the sinews of war.¹⁹

¹⁷ This paragraph is based in part upon Weulersse, II, 268-97.

¹⁸ War is the product of social disorder originating in non-observance of the natural laws inherent in the order of nature, the physiocrats asserted. They looked upon the establishment of a league of nations for perpetuation of peace as beside the point: when the laws of the natural order are observed, such a league is unnecessary, and when they are not observed, it cannot achieve its purpose. In practice they approved of a military system, with the qualification that it be for defense and not for offense (Silberner, *op. cit.*, pp. 186-220; M. Einaudi, *The Physiocratic Doctrine of Judicial Control*, Cambridge, 1938, pp. 34-35).

¹⁹ Oncken, pp. 219-20, 355-58; Quesnay, "Hommes" (hereinafter cited as *Hommes*), *R. H. S.*, I (1908), 14 ff. (This article, written about 1757 for the *Encyclopédie*, but not published, was designed to show the application of Quesnay's theory of *produit net*

Writing at a time when mercenaries were in general use, and not foreseeing the development of national armies, the physiocrats insisted that a small army of well-paid and competent mercenaries was militaristically superior to a large domestic army, the direct and indirect cost of which, furthermore, was inimical to economic welfare and therefore to the supply of the sinews of war; that competent mercenaries were obtainable in proportion as the state possessed adequate revenues;²⁰ and that artillery, the formidable but expensive new arm, could be supported only out of revenues. In short, a state less peopled relative to its revenue, and therefore enjoying greater comfort, was more able to meet war expenditures and to support effective armies than a state more peopled relative to its revenue.²¹

Quesnay believed that peasants made better soldiers than urban workers,²² but he did not attach importance to this point, as did the agrarian writers, nor did he accept the corollary view that a diminution of the rural population would necessarily weaken the state militaristically; for he believed that the economy would be less disturbed by the withdrawal, in case of need, of the *disposable* urban and excess rural labor supply, than by the withdrawal of a rural militia at the first beat of the drums.²³ Quesnay observed, too, more than a century before Admiral Mahan, that since the strength of France's chief enemy, England, rested upon sea power, it behooved France to reduce her landed forces and to extend her naval arm, a course pursuable only in proportion as revenues were derived from agriculture and foreign commerce in its products.²⁴

With respect to the third proposition,²⁵ the physiocrats con-

to population.) Pecuniary wealth had ruined Spanish agriculture and depeopled Spain (*Hommes*, p. 66). "Pecuniary fortunes . . . know neither king nor country" (Oncken, p. 337).

²⁰ Oncken, *op. cit.*, pp. 136, 219-20, 300, 355-58; *Hommes*, pp. 15-17, 39; also statements of Mirabeau and Le Trosne, cited by Weulersse, II, 6-7, 280-81.

²¹ Oncken, p. 300. "A kingdom that had less of revenues and was more peopled would be less powerful and less in comfort than another kingdom that was less peopled and that had more of revenues" (*ibid.*). Quesnay had in mind larger states, such as France and England, the latter being the less peopled. ²² *Hommes*, pp. 15-16.

²³ Weulersse, I, 246-47; II, 290-91; Oncken, pp. 355-58.

²⁴ Oncken, pp. 355-58, 584-85; *Hommes*, pp. 5, 17-23, 37; see also statements of Le Trosne and Dupont, cited by Weulersse, II, 281-82.

²⁵ See below for the argument that numbers depend on wealth.

tended that men differed greatly both in intellectual and physical traits,²⁶ and in their inherent usefulness to the community. Therefore, whether or not a new increment of population was useful and valuable to the community depended both upon the quality of that increment and upon whether or not it could obtain employment and produce at the very least its own subsistence. Propertyless unemployed persons were useless to the state and detrimental to the communal welfare. Apparently, even workers who were able to produce (at least in agriculture) only their own support were of no value to the community. It would be preferable, Quesnay indicated, for the useless increments of population to emigrate.²⁷

With respect to the fourth proposition, that the power of the state depends in part upon its institutional structure, the physiocrats contended that social arrangements must rest upon principles of social and political order consistent with the virtually self-evident²⁸ *natural laws* regulating the physical universe; that the enjoyment of economic liberty, security, and property rights is essential if the pursuit of private interest is automatically to further the general collective interest, and to insure agricultural prosperity, the foundation of communal well-being;²⁹ that in nature the government must be monarchical, not democratic or aristocratic, the enlightened despot³⁰ serving, not to declare laws

²⁶ Oncken, p. 368; also citations from Le Mercier (hereinafter Mercier), Dupont, and Mirabeau in Weulersse, II, 32-35.

²⁷ *Hommes*, pp. 42-43, 78-83; Oncken, pp. 188-89, 235, 245, 263-69, 299-300, 336, 355-58, 635; also *ibid.* (pp. 170-75, 263-65, 354), where Quesnay indicates that workers should be able to earn enough to enjoy some comfort.

²⁸ Weulersse, II, 120-29. Quesnay believed the most important of the *positive laws*—i.e., of the laws declared by the legislator—to be the provision of instruction in the natural laws (Oncken, pp. 375-76). The physiocratic opposition to undue positive legislation was founded upon the supposition that properly instructed men acted in accordance with the natural law engraven on their hearts.

²⁹ Quesnay assumed that while man has a general natural right to things "suitable to his enjoyment," and to make full use of his talents, he has the right to enjoy only that which is his property—that which he has won through labor—and to use his talents only in ways not injurious to others (Oncken, pp. 355, 368-71, 374).

³⁰ As Sée shows (*L'évolution*, pp. 214-15), the followers of Quesnay soon abandoned their defense of legal despotism and stressed the advantages of representative, parliamentary government, which they came to consider most conducive to "the greatest happiness of the greatest number." Dupont, who expressed their political theories most clearly, as late as 1815 condemned popular suffrage and advocated restricting the right to vote to the owners of land. Workers could pay no taxes, since their labor produced no net product; therefore, they had no right to influence legislation con-

as such, but to diffuse knowledge of the laws of nature, to issue laws consistent with the natural order, to prevent their violation, and to make possible and enforce their observance. Given these conditions, the strength of society and state would be at a maximum.³¹

Quesnay sought always to show that wealth is not dependent upon population; that population not only increases in consequence of progress in wealth, but at times tends to outstrip wealth and subsistence. Although he recognized that resources are valueless in the absence of men to work them, and that the exchange value of goods is contingent upon the existence of consumers, he emphasized the priority of wealth and income. Even when he virtually admitted that progress in numbers might be followed by progress in wealth, he treated population growth as essentially a result, and not a cause.³²

The increase of the population depends entirely upon the increase of wealth, upon the employment of men, and upon the employment of wealth.³³

It is not population which recruits [répare] wealth, it is wealth which recruits population: men perpetuate wealth; but wealth is first necessary to increase population and wealth.³⁴

cerning property they did not own. The state, however, was obligated to protect their natural rights (G. Chinard, *The Correspondence of Jefferson and Du Pont de Nemours*, Baltimore, 1931, pp. liv, lxxv-lxxvii, lxxv, 260-68).

³¹ Oncken, pp. 328-30, 643; Baudeau, Le Mercier, and Du Pont in E. Daire (ed.), *Physiocrates* (Paris, 1848), pp. 390, 461, 789; Weulersse, II, Bk. III. According to A. Dubois (*R. H. S.*, I, 1908, 281), the notion of natural law included only a small number of economic doctrines before Quesnay wrote. "It was the work of Quesnay to derive from the notion of natural law the entire science of economics." See also O. H. Taylor, "Economics and the Idea of Jus Naturale," *Quarterly Journal of Economics*, XLIV (1930), 205 ff., esp. sec. iii.

As M. Einaudi has shown (*op. cit.*, chaps. ii, iv-vi), while the physiocrats used the prince as the instrument "for carrying out their program of economic reform," and sanctioned "legal despotism" on this ground, they devised a system of guarantees "as a control upon the actions of the prince." Specifically most of the physiocrats favored the establishment of a supreme magistracy empowered to declare void such of the prince's legislative acts as did not conform with the natural order.

³² Oncken, pp. 207, 220, 233, 269, 289, 419; *Hommes*, p. 5. Lands "are wealth," he said, "only because their products are necessary to satisfy the needs of men, and it is these needs themselves that establish the wealth; thus, the more men in a kingdom whose territory is very extended and fertile, the more there is of wealth" (Oncken, pp. 245-46; also, *Hommes*, p. 5).

³³ *Hommes*, p. 80.

³⁴ Oncken, p. 269 n.

The population of the kingdom increases or decreases in proportion as its revenues increase or decrease.³⁵

The inhabitants of rural districts multiply then in proportion as wealth sustains agriculture there and as agriculture augments wealth.³⁶

[In Europe where it is believed that "population is the source of opulence" men mistake] effect for cause, for *everywhere population surpasses opulence*: it is wealth that multiplies wealth and men; *but the propagation of men always extends beyond that of wealth*.³⁷

Quesnay thus reasoned, in general, that men tend to propagate in, and to migrate to, places where wealth is increasing and can be made to increase, where incomes are growing in volume, where the supply of provisions is swelling, and where, in consequence, man can find employment, subsistence, and the opportunity to live in comfort; that when conditions of an opposite character prevail, and the level of comfort is falling, emigration and other immediate causes of depopulation operate to diminish numbers.³⁸

Quesnay qualified the above argument to make it consistent with his preconceptions concerning the net productivity of agriculture and the dependence of general prosperity upon agricultural prosperity. Progress in number depended upon progress in agriculture, not so much because agriculture supplied subsistence to men and materials to nonagricultural trades, but rather because agriculture alone yielded a net product. Labor in nonagricultural pursuits, however useful, yielded no net product; the monetary value of its products but equaled their monetary costs. Labor in agriculture, on the contrary, produced a net product, a monetary sum, or "value," in excess of the monetary expenses entailed in the creation of agricultural products. Agriculture, therefore, constituted the ultimate source of a nation's wealth and strength. Out of the revenue of landed property came the expenses of nonagricultural industry. Out of the net product of agriculture came the support of both the government and the diverse nonagricultural classes composing the community. Where-

³⁵ *Hommes*, p. 53.

³⁶ Oncken, p. 187.

³⁷ *Ibid.*, p. 579. My italics.

³⁸ *Ibid.*, pp. 186-87, 219, 232-38, 245-46, 269, 413, 579, 635; *Hommes*, pp. 6-7, 38-39, 53-54, 81-83.

fore, since the demand for the services of the sterile classes originated in agriculture, and since the growth of population depended upon the growth of revenue, in especial upon the growth of the *net* revenue of agriculture, it followed that growth of population, whether through immigration or through natural increase, depended ultimately upon the development of agriculture.³⁹ It followed, too, that the greater the net product of agriculture, other things equal, the greater would be the excess of production over bare needs, and the greater the opulence and comfort of the nation's inhabitants.⁴⁰

Population growth depended, not on the mere availability of subsistence, but upon the degree of prosperity in agriculture. For while Quesnay indicated that a country with a surplus of grain, such as France had,⁴¹ tended to attract foreign immigrants, he apparently did not believe their coming absolutely certain; nor did he believe that a surplus of grain necessarily induced propagation. Quesnay seems to have reasoned, rather, that agricultural products and surpluses must be freely marketable in domestic and foreign markets in order that such products may command satisfactory prices and yield the maximum gross and net returns consistent with free competition; for, given as high as possible gross and net returns in agriculture, agriculturalists are able both to reinvest heavily in agriculture and to purchase or make possible the purchase of large quantities of the products of commerce and industry. The resulting increase in the demand for labor in agricultural and nonagricultural pursuits attracts immigrants and favors the conservation and propagation of the domestic population.⁴²

Despite a few statements that suggest the contrary,⁴³ Quesnay did not believe that population increased always and everywhere in the same proportion as wealth. He indicated, for example, that numbers relative to wealth were much greater in China than

³⁹ *Hommes*, pp. 6-7, 22, 38-39, 79, 82-83; Oncken, pp. 180, 207-08, 216, 233-39, 244-49, 264-65, 271, 299-300, 334-36, 355-56, 391-94; Weulersse, I, Bk. II; II, 285-89.

⁴⁰ Oncken, pp. 300, 336; *Hommes*, p. 15. ⁴¹ Oncken, pp. 172-73.

⁴² Oncken, pp. 207-08, 219, 242, 246. "Men multiply then in proportion to the revenues of landed property. . . . Thus a state peopled only with merchants and artisans could subsist only on the revenues of the landed property of foreigners" (*ibid.*, p. 234).

⁴³ E.g., Oncken, pp. 269, 271, 354, 579, 635; Weulersse, II, 283-85.

in France, and that in consequence the scale on which people lived in China was much lower;⁴⁴ that population might, or might not, be superabundant.⁴⁵ In his treatment of checks to population growth he implicitly recognized that numbers may be greater or less in a given state of wealth, and in his discussion of wages⁴⁶ he indicated that wages may be on a subsistence or on a comfort level. In his treatment of the types of expenditures of proprietors and the wealthy, Quesnay indicated that although the wealthy spent on luxury rather than on propagation, they could influence propagation by their manner of spending; and that expenditures for agricultural products were more favorable to population growth than were expenditures for nonagricultural products.⁴⁷ His notion of gross and net product in agriculture necessarily implied, as Landry has shown,⁴⁸ that an increase in net product tended to augment both the population and its average objective standard of living.

Quesnay described a great many checks to population growth—checks that fall roughly into one of four categories: (1) ultimate (i.e., all conditions prejudicial to agriculture and the augmentation of the net product, such as taxes and other burdens, the obligation to serve in the militia, restrictions on freedom of trade in grain and provisions, policies and modes of expenditure that diverted capital from agriculture); (2) intermediate, primarily checks originating in policies prejudicial to agriculture (e.g., urbanization, some types of manufacturing, and luxurious consumption); (3) miscellaneous (e.g., factors favorable to emigration and unfavorable to immigration); (4) immediate (e.g., conditions conducive to mortality, or prejudicial to natality).

The then distribution of tax and analogous burdens was inimical to agriculture, Quesnay believed. Fear of militia service drove the young men to cities, and the service itself took them from the farms.⁴⁹ The system of taxation in effect tended to

⁴⁴ Oncken, pp. 579-80, 634-36.

⁴⁵ *Hommes*, pp. 79-80, 82-83.

⁴⁶ See below for treatment of checks and wages.

⁴⁷ See below; also Weulersse, I, 382-84, 487-95.

⁴⁸ *Op. cit.*, pp. 30-31.

⁴⁹ Oncken, pp. 183-84, 267, 299; *Hommes*, pp. 5, 16, 80-82. Quesnay estimated that in thirty years the militia service had driven more than two million persons out of agriculture; and that, by preventing marriage and propagation, it had deprived France of 1,200,000 children in thirty years (*ibid.*, p. 16).

deprive agriculture of necessary capital, for the taxes were indirect and therefore expensive to collect; furthermore, the cultivator could not predict what his tax burden would be, and adjust his affairs accordingly. Moreover, since the taxes were arbitrarily imposed, and inequitably distributed by region, they tended, along with the *corvées*, to induce ruralists to seek security for themselves and their capital in less tax-burdened areas.⁵⁰ Quesnay and his school, therefore, urged that the government raise all necessary revenue through a single tax imposed upon the net product of land,⁵¹ for they believed that since all tax revenue ultimately came out of the net product, it would be cheaper to tax at the source and meet governmental needs with cash.⁵² Then agriculturalists, inspired with hope and confident of enjoying the fruits of their labors, would work and invest; agriculture no longer would lack men and capital; and both agricultural production and numbers would expand.

The net income of the agricultural class, and (therefore) the

⁵⁰ Oncken, pp. 171, 192, 227-28, 237, 264, 297, 299, 332-33, 337-41, 696-716; *Hommes*, pp. 38-39, 43; Weulersse, I, 439-74. Also Quesnay's "Impôts," *R. H. S.*, I (1908), 137-86.

⁵¹ According to L. Einaudi, the physiocrats interpreted the net product, or free income of the landowning class, to be "free or disposable, because the recipient does not receive it as compensation of an economic service." Since the recipient can live without working, his time can be devoted to public service, and since his income is not necessary remuneration, it can be diverted "in part to public purposes." (M. Einaudi points out that, on physiocratic reasoning, the state "could not appropriate to its own use the entire 'free' part of the national income. [Otherwise] . . . tragic consequences . . . would follow.") The national dividend, the physiocrats supposed, "included an unknown quantity"—the "net product," in their terminology—which "is not the property of farmers, wage-earners, manufacturers, capitalists, etc., because it is the fruit of the work done by the political class, acting either individually or collectively, through the agency of the State. The devolution, through the device of taxation or otherwise, of the unknown quantity to the political class and to the State is not a burden on the taxpayers, any more than the devolution of wages to wage-earners or of interest to capitalists or of profit to entrepreneurs is a burden on other classes. It is firstly a problem of producing and then of distributing the whole national dividend to all interested parties" (Einaudi, "The Physiocratic Theory of Taxation," *Economic Essays in Honor of Gustav Cassel*, London, 1933, pp. 131-32, 134-35; also M. Einaudi, *op. cit.*, pp. 11-12).

⁵² Oncken, pp. 337-41; Weulersse, II, 346-86. Baudeau proposed taking for the support of the state, 30 per cent of the net product, which tax, according to Gide (C. Gide and C. Rist, *A History of Economic Doctrines*, New York, 1915, p. 39 n.), amounted to 12 per cent of the gross revenue of France. The Spaniard, F. Centani, advocated a similar tax a century earlier, saying that such a method of taxation would be favorable to population growth (*Tierras; medios universales . . . para que . . . tenga la real hacienda dotación fija para asistir a la causa pública*, Madrid, 1671). I am indebted to Professor R. S. Smith for the reference to Centani.

growth of population, was limited by restrictions upon the sale of grain, and upon the agriculturalist's right to raise such crops as he pleased, by preferential treatment of manufacturing, and by the diversion of capital from agriculture. The various restrictions upon the grain trade in France and upon the exportation of grain depressed the price received for grain by agriculturalists, thus reducing agricultural revenue and net income.⁵³ Concentration on certain crops at the expense of other crops tended to depress the money value of individual crops and of total agricultural production, and thus to reduce the net product of agriculture.⁵⁴ Protection of manufactures in the form either of depressed grain prices, or of tariffs, tended to shunt labor and capital out of agriculture, thus reducing its net product.⁵⁵ Ill-treatment of ruralists drove capital out of agriculture,⁵⁶ while conditions favorable to the winning of great fortunes in urban centers and through trading in public and private securities (e.g., *rentes*) kept pecuniary capital in channels that agriculture could not tap.⁵⁷

Urban conglomeration, Quesnay's analysis suggests, was an intermediate check, for it originated primarily in the conditions already described as unfavorable to agriculture and favorable to manufacturing. Such conglomeration was also attributable, Quesnay believed, to the attractions of the court, to the fact that pensions and *rentier* incomes could be won and enjoyed in cities

⁵³ Oncken, pp. 182, 214-15, 229-32, 242, 271, 286-94; Weulersse, I, 503-77; II, 470-74, 508-12. Quesnay and his followers did not defend foreign trade per se, for they considered commerce sterile, ignored the laws of comparative and absolute advantage, and emphasized internal trade as of paramount importance. Much of their defense of freedom in the international sphere of trade appears to have been motivated by their desire for an outlet for the surplus grain supply; it is traceable also to their acceptance of the principles of economic liberty, and (with qualification) the corollary principle that the economies of nations are interdependent. See Oncken, pp. 239, 321; Baudeau, in Daire, *op. cit.*, pp. 742, 808, 814; Mercier, *L'ordre naturel* (in Collection des économistes et des réformateurs sociaux de la France), pp. 327-28. For a complete account of the international trade theory of the physiocrats see A. I. Bloomfield, *American Economic Review*, XXVIII (1938), 716-35; R. Savatier, *La théorie du commerce chez les Physiocrates* (Paris, 1918); E. Depitre's introduction to Dupont's *De l'exportation et de l'importation des grains* and L. P. Abeille's *Sur le commerce des grains* (ed. in Collection des économistes, etc.).

⁵⁴ Oncken, pp. 333-34. Quesnay attacked in particular the interdiction of the planting of new vines, saying that viniculture not only yielded a much higher net product than grain culture, but, by augmenting the demand for grain, increased the net return of grain culture (Oncken, pp. 194, 219, 278-81, 346-47; also Weulersse, I, 423-30).

⁵⁵ *Ibid.*, pp. 170, 192, 333.

⁵⁶ Oncken, pp. 193-94, 234-35, 302-03, 333.

⁵⁷ *Ibid.*, pp. 186-87, 268, 297, 337.

(especially Paris), and to the capacity of cities to satisfy man's desire for pleasure and luxurious living.⁵⁸ Urban conglomeration was unfavorable to propagation, not only because it diverted men and capital from agriculture, and stimulated *luxe de décoration* at the expense of *luxe de subsistance*,⁵⁹ but also because it aggravated the desire to consume conspicuously at the expense of the desire to marry, propagate, and accumulate capital for the improvement of rural property, and because it bred contempt for the rural mode of life.⁶⁰

Among the miscellaneous checks to population growth in France mentioned by Quesnay may be included the expense of a large army which diverted capital from agriculture,⁶¹ and the factors causing net emigration from France. Religious persecution and intolerance drove men and capital from France and prevented the coming of immigrants.⁶² Misery exercised a similar effect.⁶³ Quesnay's followers looked upon the feudal *droit d'aubaine*, by which the crown was empowered to take the property of foreigners at death, as an obstacle to the immigrant.⁶⁴

The immediate checks to population—that is, those set in motion by the ultimate and intermediate checks—were not treated in detail by Quesnay. Misery and bad food, he implied, augmented mortality and infant mortality in rural areas and in the

⁵⁸ Oncken, pp. 268, 323.

⁵⁹ As has been implied, and as is indicated later in this chapter, *luxe de subsistance* was favorable to agricultural production because it entailed a demand for the products of agriculture, thus swelling gross and net agricultural income; *luxe de décoration*, on the contrary, according to physiocratic reasoning, did not create a corresponding demand for the products of agriculture.

⁶⁰ *Ibid.*, pp. 189, 245, 294, 302-03. The manufacturers of decorative luxury had made possible the spread of this form of luxurious consumption, of which Quesnay wrote (*ibid.*, pp. 302-03): "Ainsi les dépenses de décoration qui entraînent d'autres dépenses d'ostentation, et qui sont devenues des dépenses de besoin plutôt que des dépenses de luxe, ne forment-elles pas une espèce de luxe désordonné et destructif; ce luxe dominant ne porte-t-il pas les citoyens à épargner sur la propagation ou à éviter le mariage, pour soutenir des dépenses forcées; n'induit-il pas les femmes à chercher des ressources dans le dérèglement; n'inspire-t-il pas aux hommes vains toutes les intrigues et tous les expédients irréguliers pour subvenir aux dépenses du faste; ne répand-il pas du mépris sur les états médiocres; n'écarte-t-il pas du travail, ne provoque-t-il pas aux plaisirs, ne corrompt-il pas les mœurs, n'enerve-t-il pas le courage, ne plonge-t-il pas dans la mollesse, ne débilite-t-il pas les forces du corps?"

⁶¹ *Hommes*, pp. 13, 17-18; Oncken, p. 355.

⁶² *Hommes*, pp. 7-8, 13; Oncken, p. 333.

⁶³ *Hommes*, p. 7.

⁶⁴ Weulersse, II, 250-51. Toussaint (*Les mœurs*, pp. 510-11) had condemned the *droit d'aubaine* in 1748.

lower classes.⁶⁵ War destroyed many.⁶⁶ Debauchery diminished the number of marriages in Paris and other cities,⁶⁷ immigration from the countryside alone serving to keep numbers intact.⁶⁸ Mercenary wet nursing in rural districts around cities reduced the fecundity of rural women.⁶⁹ Voluntary celibacy prevented multiplication.⁷⁰ Birth control, too, checked propagation, he implied, without naming the methods.⁷¹

Although Quesnay rejected the view that population growth creates wealth, he was a populationist in several senses of the term: (1) he condemned the conditions that allegedly had produced depopulation in France; (2) he indicated, perhaps unwittingly, that under certain conditions population growth was favorable to the augmentation of wealth; (3) both in his treatment of the checks to population growth and in his defense of agricultural reform in France, he indicated that the effectuation of his proposals would greatly increase the actual population and the population capacity of France.

Quesnay accepted the current belief that France's population had declined in size: war and persecution had reduced it from twenty-four million in 1650 to nineteen and one half in 1701, and to fifteen and one half by the close of the War of the Spanish Succession, and it numbered only about sixteen million around 1750.⁷² He seems to have attached greater significance to rural depopulation than to general depopulation, however, presumably because he believed that the elimination of the causes of rural depopulation would restore population growth in general.⁷³

⁶⁵ Oncken, pp. 235, 245, 265, 267-68, 635; *Hommes*, p. 13.

⁶⁶ *Hommes*, pp. 7-8, 13; Oncken, p. 245.

⁶⁷ *Hommes*, p. 11; Oncken, p. 245.

⁶⁸ *Ibid.*, pp. 11-12; Oncken, pp. 269-70. Over half the population of Paris was from the provinces, Quesnay noted, following Déparcieux (*Hommes*, p. 12).

⁶⁹ *Hommes*, p. 12. Déparcieux (*Essai sur les probabilités de la durée de la vie humaine, etc.*, Paris, 1746, p. 40) had also pointed out that "women who do not feed their babies by breast become pregnant more often than mothers who do." He indicated that infant mortality was higher when babies were artificially fed, when pregnancies were too frequent, and when hired wet-nurses failed to give babies placed with them the same care as their own. He pointed out further that weak children, who survived the infirmity of their mothers and bad care, reached maturity only to "reproduce their poor constitutions."

⁷⁰ *Hommes*, p. 13; Oncken, pp. 189, 245, 303.

⁷¹ Oncken, pp. 189, 245, 294, 303. See n. 60, above.

⁷² *Hommes*, pp. 7-8; Oncken, p. 245.

⁷³ Oncken, pp. 186-87, 219, 234-35, 243, 246, 323, 333, 341, 354, 635.

Quesnay apparently believed that, at the time he was writing, French agriculture was in what amounts to a state of increasing returns, even though he failed to investigate the determinants of the net product or to develop laws of returns.⁷⁴ For in the very paragraphs in which he refers to the actual decline of the French population he states that a diminution in population is accompanied by a relatively greater diminution in wealth.⁷⁵ Presumably Quesnay believed that, given the then population of France, an increase in numbers would be accompanied, within limits, by a relatively greater increase in wealth and income.

Certain of the propositions embodied in the physiocratic program of reform were defended by the physiocrats on the ground, among many others, that they were favorable, rather than unfavorable, to population growth. The physiocratic opposition to protection for manufacturing and to the undue development of foreign trade in luxuries and manufactures, was based upon the belief that such protection was prejudicial to agriculture and that such trade was subject to hazardous fluctuation and to destructive foreign competition. Wherefore such protection and such trade were unfavorable to population growth.⁷⁶ In contrast to most of the populationists, the physiocrats advocated the un-

⁷⁴ Quesnay does not clearly distinguish between the effect of successive applications of capital upon returns at the margin, and the effect of the substitution of large-scale for small-scale cultivation. Although the physiocrats made no effort to discover the laws of variation in gross returns, and in expenses of exploitation, in agriculture, they apparently did not believe gross and net product to be susceptible of unlimited increase, given unlimited successive advances. Bye (*op. cit.*, pp. 70-72) attributes their failure to treat the laws of returns to the fact that the mode of analysis implicit in Quesnay's *tableau* was not favorable to the treatment of the laws of returns in industry and agriculture. P. Moride (*Le produit net des physiocrates et la plus-value de Karl Marx*, Paris, 1908, pp. 157, 159) concludes that while Quesnay was aware of differentials in soil fertility, he did not conceive of the Ricardian theory of rent, or of the law of diminishing productivity. L. P. May (*R. H. S.*, XX, 1932, 69, 71, 73) believes that Mercier may have had a notion of differential rent due to differences in location, and may have recognized that successive advances resulted in less than proportional net returns. If so, he made little use of this fact. The Ricardian theory of rent was formulated in the *Ephémérides* (X, 1768, 194 ff.) by a writer who signed himself with the letter "N," a letter sometimes used by Quesnay. See also below, Dupont, n. 143.

⁷⁵ "If the number of men diminishes one-third in a State, wealth there must diminish two-thirds because the expense and product of each man form a double wealth in society." See Oncken, p. 245; also *ibid.*, pp. 206-07, where Quesnay indicates that early in the seventeenth century, France, with a population one third greater than in 1750, produced more than half again as much grain. The arithmetic of the *Tableau économique* is remindful of the multiplier effect in Keynesian investment theory.

⁷⁶ Oncken, pp. 189-90, 240, 294; Weulersse, I, 280-315.

restricted export of grain so long as a domestic surplus existed⁷⁷ and agriculture remained relatively underdeveloped and in need of capital. Such exports would elevate the price of grain, swell the net product of agriculture, induce increased investment in agriculture, and thus cause agriculture and the wealth of the nation to expand; they would bring the nation a net return above expenditures, a net return not obtainable through the export of the products of "sterile" nonagricultural industries.⁷⁸ Believing the rate of return on capital to be greater in agriculture than in urban commerce and in colonial and nonagricultural enterprise, the physiocrats opposed policies which, by favoring nonagricultural investment, diverted capital from agriculture and thus checked progress in wealth and numbers.⁷⁹

Similar preconceptions underlay Quesnay's analysis of *luxe*. Although he apparently was somewhat opposed to luxurious consumption as such,⁸⁰ he did not condemn all forms of *luxe*. In general, he approved of *luxe de subsistance*, which entailed a demand for the services of the *productive class*, and condemned *luxe de décoration*, which merely swelled the demand for the services of the *sterile classes*. *Luxe de subsistance*—i.e., luxury consisting solely or predominantly of the products of agriculture—augmented the demand for agricultural commodities, thus increasing their monetary value and the pecuniary income of the landowning and productive class; in consequence, the proprietors could make greater investment in agriculture and thus expand it and increase the gross and the net product. *Luxe de décoration*—i.e., luxury embodying little or no agricultural raw materials and relatively large amounts of the labor of the *sterile classes*—on the contrary, shunted sales income out of agriculture and returned to the proprietors little or no money that might be invested

⁷⁷ When it was contended that the unrestricted right to export grain would elevate its price too much, the physiocrats changed (in 1768) their argument to a mere defense of freedom to export and import grain (Weulersse, II, 475-76). See also L. P. Abeille, *Corps d'observations de la société d'agriculture, de commerce & des arts* (Rennes, 1760), pp. 88-115.

⁷⁸ Oncken, pp. 229-35, 287-89, 293, 299, 352; *Hommes*, pp. 51, 65; Weulersse, I, 552-55; II, 275-76, 470-76. Nonphysiocratic exponents of free trade in grain lacked this theoretical argument of Quesnay.

⁷⁹ Oncken, pp. 189-90, 293-94, 297-98, 309-11, 469; Weulersse, I, 323, 388-402; II, 293.

⁸⁰ E.g., Oncken, pp. 189, 302-03; *Hommes*, pp. 13 ff.

in agriculture and the augmentation of the net product. Accordingly, so long as agriculture was not as highly and fully developed as possible, *luxe de décoration* was prejudicial to the "opulence" and "prosperity" of the nation and therefore to its demographic growth, whereas *luxe de subsistance* was favorable.⁸¹

Quesnay's analysis of the effect of *luxe* upon population growth thus runs counter to that of Cantillon. The latter asserted that the use of land for purposes other than the creation of subsistence for the domestic population (e.g., for the production of exports, for hunting preserves, etc.) diminished the supply of subsistence and reduced the population supportable at a designated level of living. Quesnay, on the contrary, held that any increase in the demand of foreign countries, or of already well-nourished classes in France, for French agricultural products, was favorable to population growth in France. On the face of it, Quesnay's analysis seems invalid and Cantillon's correct. Quesnay's position is understandable, Landry reasons, only on condition that progress in French agriculture was being held in check by lack of capital, which lack could be repaired through an augmentation of the demand for agricultural products; and that investment of the capital thus secured would expand the gross and net output of agriculture and increase the capacity of France to support population.⁸² Quesnay's position is understandable also on condition that numbers will grow only where employment is obtainable, and that employment is most likely to be created when new investment flows initially into agriculture.⁸³

Unlike many of the populationists, Quesnay and his followers advocated the use of those methods of agricultural production

⁸¹ Oncken, pp. 310, 317-19, 335, 354-55, 419; Weulersse, I, 383-85, 485-95; also Dubois, n. 127, below. The physiocrats asserted, however, that expenditures for decorative luxuries were preferable to hoarding (Weulersse, I, 494). Given a situation in which further "advances" in agriculture would yield no greater return than industry, it is possible that Quesnay would not have reasoned that *luxe de subsistance* was more favorable to population growth (see n. 97, below).

⁸² Landry, *R. H. S.*, II (1909), 44-46. While Quesnay admitted that a small country might under certain conditions increase its population by exchanging non-agricultural products for subsistence, he did not grasp Cantillon's argument in general, Landry concludes. Even if French agriculture had not been underdeveloped, Quesnay would not have reasoned, as Cantillon did, that the way income is distributed and then spent affects employment, wages, the frequency of marriage, and procreation (Landry, *ibid.*, pp. 45-47; *R. d. c. p.*, XXIV, 368-70). ⁸³ See n. 92, below.

which minimized unit cost and maximized net product. Large-scale cultivation and advances were preferable to small-scale because they yielded a greater net product, a much higher rate of return.⁸⁴ Improvements in internal transportation were desirable because they cut shipping costs and thus augmented the net monetary sale value of agricultural products.⁸⁵ To the charge that labor-saving and cost-reducing methods of production would displace part of the agricultural population, the physiocrats made two replies. Were a smaller agricultural population able to make full use of the nation's agricultural resources, the total population of the country would nevertheless be much greater, for the net product available for the support of the sterile classes would be greater and would cause the latter to increase in a degree more than sufficient to offset the decrease in the agricultural population.⁸⁶ It was more likely, the physiocrats added, that the rural population would grow absolutely, but not relatively, inasmuch as the effectuation of the physiocratic program of reform would expand both the population capacity and the population of France by 50-100 per cent.⁸⁷

Even though Quesnay did not treat the laws of returns, he indicated that there were ~~limits to population growth~~, and that continuous population growth was disadvantageous to the community and its population. There were limits to the potential wealth⁸⁸ of states, and therefore to the capacity of a state to support population, however efficiently its resources were used. When these limits were exceeded, as in China, wages fell to bare sub-

⁸⁴ Oncken, pp. 182, 186, 206, 219, 261, 320, 334, 342, 346.

⁸⁵ *Ibid.*, p. 335. Urban conglomeration injured agriculture because it made the average distance from the producer to the consumer greater than it would be if the population were evenly distributed, and thus increased transportation costs and decreased the net return in agriculture (*ibid.*, p. 323).

⁸⁶ Oncken, p. 243; see also Weulersse, II, 286-89. Arthur Young (*Travels in France*, II, 381), who was aware of the greater productive efficiency of large-scale agriculture, nevertheless attributed the populousness of France to subdivision of the soil, since "whatever promises the appearance even of subsistence, induces men to marry."

⁸⁷ Saint-Peravy estimated that France's population could grow from sixteen to twenty-five million; Mirabeau, from sixteen to thirty million, three fourths of whom would remain rural (Weulersse, I, 288). Quesnay's estimates of French agricultural yields suggest that he supposed that France could feed at least 100-150 per cent more people. See Oncken, pp. 172-73; *Hommes*, p. 10, where he estimated that but half of France's land was cultivated, and badly at that. ⁸⁸ See preceding n. 87.

sistence, mass poverty and misery reigned, and men no longer were able to multiply; part of the population was superabundant, unable even when employed in agriculture to produce and earn enough to provide self-subsistence and contribute to the support of the state. In such circumstances only emigration or removal to colonies remained as a source of relief.⁸⁹

Although Quesnay noted that at times population tends to outstrip subsistence, he apparently did not believe that men would become as superabundant in France and Western Europe as in China.⁹⁰ Even though certain of his comments on wages were very pessimistic, his apparent faith in education and in man's capacity to act in accord with the natural laws of an essentially beneficent universe suggest that he did not believe population pressure foreordained.⁹¹

Quesnay believed that a population could be too large, or too small, and that it would not assume the right size if institutional arrangements did not conform to natural law. He did not indicate specifically how large a population ought to be, however. That a population was too small when further growth could bring about a proportionally greater increase in wealth is evident in the context of his remarks.⁹² That a population had become too large when the pressure of numbers had begun to push the realizable scale of living below a not well-defined comfort level,⁹³ and when additional workers in agriculture could no longer produce enough to yield a certain amount of comfort and augment the net product, is evident in certain of his remarks.⁹⁴ Judging

⁸⁹ *Hommes*, pp. 79-83; Oncken, pp. 579-80, 634-36.

⁹⁰ Weulersse, II, 553-54.

⁹¹ See Oncken, pp. 268-69; Weulersse, II, 140-42, 298-99; also below, on wages.

⁹² See above, n. 75. Quesnay did not always differentiate between seeming overpopulation, attributable to unemployment, and overpopulation attributable to a deficiency of resources. He was aware of this difference, however, much of his program being designed really to increase employment and to distribute the population correctly among occupations (*Hommes*, pp. 7, 38). ⁹³ Oncken, p. 336.

⁹⁴ "Is not a man profitable to the state only in consequence of that which he produces and in virtue of that which he spends of his gain or revenue; is it not by consumption and reproduction that men perpetuate and augment wealth? If the peasant who has good food, clothing, the disposition of his own little menage, [and] some cattle, is not more profitable to the State through his consumption and his activity to support an ease that he fears to lose than would be a peasant discouraged and reduced to live miserably . . . ? . . . The peasant is useful in the country only as long as he produces and earns by his work, and as far as his consumption of good

from the context of his various discussions, a population had attained to the right size when the number of peasants was as large as was consistent with their maintenance of a comfortable scale of living, and the employable nonagricultural population was supportable at a family comfort level by the activity and expenditure of the agricultural population.⁹⁵ A population of this right size was smaller than the supportable maximum⁹⁶ under similar conditions.⁹⁷ Certain laws designed to prevent population from becoming too large were commendable.⁹⁸ Indigence due to population pressure could be relieved neither by reducing inequality nor by distributing alms.⁹⁹

aliments and good clothing tends to support the price of provisions and the revenue of property, to augment manufacturers and artisans and enable them to earn, who all are able to pay subsidies to the king in proportion to their products and earnings" (Oncken, pp. 263-64, 245). His italics. See also *Hommes*, pp. 43, 79-80.

⁹⁵ Landry believes that Quesnay did not fully see the contradiction between increase in numbers and increase in the ratio of population to wealth, and did not, therefore, try to resolve it. It seems to the writer, however, that he was aware of the conflict, but did not attempt its resolution because of his great concern with agriculture and with the populationist arguments of his day, and because the arrangement of figures in the *Tableau économique* emphasizes the circulation of money and allocation of resources, and not the operation of the laws of returns through time.

⁹⁶ Quesnay seems to have recognized, when he discussed the usefulness of additional increments of population, that the answer turned on the kind of methods employed in agriculture; that a population too large for a backward economy was too small for a progressive economy.

⁹⁷ "Are not men drawn into a kingdom in proportion to wealth; nevertheless if the productions and the commerce require less of the labor of men in one kingdom than in another, would not the first find itself more wealthy and less peopled than the latter; for if a kingdom produces a great deal of provisions that may be dear, easy to cultivate and to export, and if, in order to procure the sale, it draws with profit, for its consumption, much of the merchandise of manual labor from foreign parts, will it not occupy fewer men and will it not be more wealthy; will there not be in this kingdom more comfort and less want than if it required a greater number of men to procure the same wealth; does it not follow from this that the government must be more attentive to the increase of wealth than to the increase of population, and that it is the wealth that the labor of men procures which must regulate, as is proper, the state of the population?" (Oncken, p. 301.)

⁹⁸ Quesnay approved the law of the Incas fixing the minimum age for marriage at twenty for females and twenty-five for males, and added that its application in China would augment the wealth of families and "prevent an excess of population, from which result the disastrous effects which appear to degrade the government of this empire" (Oncken, p. 636).

⁹⁹ The beneficiaries of inequality founded upon landed property in a competitive community could enjoy their wealth only by circulating it and employing the propertyless; consequently there could be no indigence in the absence of population pressure. Indigence could be attributed only to such inequality as was produced by monopolies, bad government, and "brigandage of exorbitant taxes." See Oncken, p. 635. Since alms came out of the disposable resources that property owners used to employ workers,

II

Inasmuch as Quesnay's disciples accepted his main theses with virtually no qualification, only certain of their opinions need be described.¹⁰⁰ Mirabeau, upon his conversion to physiocracy, modified his earlier views¹⁰¹ on trade, luxury, the productivity of non-agricultural labor, and the advantageousness of small-scale agriculture. He was able consistently to retain his early optimism, his opinion that agriculture is of primary importance,¹⁰² and his thesis that population growth is limited by wealth and subsistence.

Each species, he now asserted, is animated by an unlimited urge to propagate, the fruits of which are regulated with respect to their number by subsistence. Wherefore that species (namely, man, who exercises most control over nature) which can make available to itself the largest amount of subsistence will become relatively most numerous; and that people will multiply to the highest level among whom, other things equal, checks to necessity production and wealth accumulation (e.g., unsound fiscal policies, destructive expeditions, brigandage, spoliation, decorative luxury, unfruitful expenditures, war, unnecessary taxes, monopolistic and other obstructions of commerce) are least operative.¹⁰³

While Mirabeau no longer emphasized the need to encourage population growth, since numbers would swell as subsistence increased, he indicated that, given the reforms proposed by the physiocrats, France, then capable of supporting only sixteen million, could support thirty million.¹⁰⁴ He observed, too, that while "the multiplication & the conservation of the human species" was the end of the science of government,¹⁰⁵ multiplication was possible and desirable only in proportion as agriculture could

alms were but "a retrenchment . . . of wages"; moreover, since alms reduced rather than increased the labor set to work in agriculture, such charity could not relieve indigence and probably aggravated it (Oncken, pp. 579-80).

¹⁰⁰ As late as 1784, M. Grivel repeated Quesnay's views on population. See "Agricole," *Encyclopédie méthodique (Économie politique et diplomatique, I)*, LXXII (Paris, 1784), pp. 57-69.

¹⁰¹ See Chapter IV; also *ibid.*, n. 64, on his conversion.

¹⁰² "Agricultural societies [are] the source of all goods and of all population" (*Philosophie*, p. 164).

¹⁰³ *Ibid.*, pp. 154-57, 169, 178-80, 183, 185.

¹⁰⁴ Weulersse, *op. cit.*, II, 288; *Philosophie*, p. 183.

¹⁰⁵ *Philosophie*, p. 153.

be rendered prosperous and subsistence could be increased.¹⁰⁶ In the absence of a counterbalancing augmentation of subsistence, new increments of population but intensified population pressure, conduced to war, and gave rise to misery that was often destructive to population.¹⁰⁷ For these and other reasons, measures to multiply marriages and births not only were futile but were to be condemned.¹⁰⁸ The military power of a state depended not on mere numbers, but on the availability of means to support troops.¹⁰⁹ The political strength of a state depended not upon populousness as such, but upon the ability of the population to obtain suitable employment and earn a comfortable existence.¹¹⁰ Hedonistic man, governed by need and desire and operating within the framework of nature's beneficent laws, tended to multiply sufficiently when economic conditions warranted.¹¹¹

As has been noted, certain of Mirabeau's earlier ideas underwent change following his conversion to physiocracy. Luxurious consumption, he now maintained, was harmful and unfavorable to population growth in proportion as such consumption diverted resources from productive to sterile employments; it was beneficial in so far as it augmented agricultural income and investment.¹¹² The exportation of grain and provisions was desirable in so far as it was necessary to provide a market and good prices

¹⁰⁶ *Ibid.*, pp. 163-64.

¹⁰⁷ *Ibid.*, pp. 165-67, also pp. 154-55. Mirabeau was more optimistic, however, than other physiocrats with respect to the effect of population growth upon rural wages (Weulersse, II, 353 n.).

¹⁰⁸ *Philosophie*, pp. 154-55, 165. He condemned the establishment of hospitals for the succor of the poor (*ibid.*, p. 155).

¹⁰⁹ *Ibid.*, pp. 166-67. A wealthy people could better resist invasion under a monarchical than under a republican government (*ibid.*, p. 157).

¹¹⁰ *Ibid.*, pp. 155-56, 158-59, 173, 175.

¹¹¹ *Ibid.*, p. 408; also pp. 158-59. Man, like other economic machines, would be forthcoming, apparently, as long as their capacity to produce exceeded their cost (*ibid.*, p. 408).

¹¹² While Mirabeau sought to demonstrate in terms of the *Tableau économique* that excessive *luxe de décoration* could "quickly ruin . . . an opulent Nation," he stressed, perhaps more than Quesnay, the relative character of harmful and harmless *luxe*, saying that the more "degraded" a nation's agriculture, the larger must be the relative amount of expenditure devoted to the goods and services of the *productive* class. He described as uneconomic proposed taxes on domestics and animals that consumed agricultural products. To check undesirable *luxe* he proposed not sumptuary laws, but the suppression of wasteful fiscal practices (*Philosophie*, chaps. vi, x; *L'ami des hommes*, 1760 ed., Part VI on the *Tableau économique*; Weulersse, I, 382-83, 487-95).

for French agricultural products.¹¹³ Mirabeau no longer reasoned, as in his *L'ami des hommes*, that France profited most from the exportation of goods embodying much labor. He no longer emphasized the superiority of small-scale over large-scale agriculture; yet in at least one instance he defended the former on the political ground that it gave rise to a relatively larger number of healthy and simple beings.¹¹⁴

Although Mirabeau did not conceive of an optimum population, he did insist that population be not so dense as to make it impossible to employ every worker in such wise as to assure him both comfort and the ability to contribute to the prosperity of the community.

It is not by the number of men that one must judge the power of a State, but by the comfort in which the inhabitants live. . . It is above all necessary that the common people be in a state to consume products of good value. . . . It is necessary to extend the population, it is also [necessary] to limit it. . . . In order to have more men, far from restraining consumption, it is necessary to expand it.¹¹⁵

He no longer asserted, as in *L'ami des hommes*, that population growth was good in itself and worthy of encouragement. In short, he became a full-fledged disciple of Quesnay.

Mercier, the codifier of physiocratic doctrines, concerned himself, far more than Quesnay, with the more purely philosophical aspects of physiocracy. Mercier reasoned that the multiplication of men and the achievement of the greatest possible happiness constituted the double objective of the formation of society—an objective perceivable in the intentions of the Deity and realizable on condition that social institutions were in “perfect accord.”¹¹⁶ Such an accord tends to exist when men enjoy complete economic liberty and the unfettered right of private property, for, given these conditions, each seeks, works for, and “perpetually” tends toward “his best possible state,” and thereby

¹¹³ *Philosophie*, pp. 183-85.

¹¹⁴ Weulersse, II, 320 n.; also II, 312, 315-16.

¹¹⁵ *Philosophie*, pp. 173, 175, 177, 169; see also pp. 155-56, 166-69.

¹¹⁶ *L'ordre naturel* (ed. in *Collection des économistes*, etc.), pp. 19-21.

automatically furthers the interest of society, which then coincides with that of the individual.¹¹⁷

Mercier recognized, as had Quesnay, the conflict between growth in numbers and growth in income, but he did not resolve it in terms of anything like an optimum theory. Mercier stated, on the one hand, that men can multiply only "in proportion to the production which must enter into their consumption," and will be prevented from multiplying by whatever arrests "the multiplication of products"; on the other, that multiplication can carry population beyond the number supportable in comfort, or even supportable at all.¹¹⁸ He apparently supposed, given correspondence between the actual social order and the natural order, and given a government whereunder the cultivation of land could steadily progress, that there would be no conflict between population growth and individual happiness; that man's natural tendency to augment and vary his satisfactions, however great they already were, would constantly be gratified, inasmuch as the "progressive abundance of production" would always precede "the progressive increase of population"; and that a steady expansion of total and per capita productivity and prosperity would continue to accompany growth in numbers.¹¹⁹ If, however, government were bad, and the actual order deviated from the natural order, production would diminish, and, in consequence, population would decrease and mendicants would grow in number, despite laws against them. It behooved statesmen, therefore, "to bring about a favorable balance between consumption and production," and thus assure men happiness.¹²⁰

¹¹⁷ *Ibid.*, pp. 20-24, 26-27. "Social liberty," however, did not imply the right of each to do as he would, regardless of the interests of others. The "essential order" was one of "reciprocal duties and rights." Accordingly, one could derive from the rights of property only such "satisfactions which are able to result from it without prejudice to the rights of property of other men" (*ibid.*, pp. 21, 26). Quesnay expressed a similar view (Oncken, p. 371). See also M. Einaudi, *op. cit.*, chap. vi.

¹¹⁸ *L'ordre*, pp. 19-20. According to Mercier, "the greatest possible happiness" consisted "in the greatest possible abundance of objects suitable for our employment, and in the greatest possible liberty to profit by them" (*ibid.*, p. 20).

¹¹⁹ *Ibid.*, pp. 21, 26; Daire ed., p. 523. He observed, also (*ibid.*, p. 621), that given liberty and the unrestricted right to property and the pursuit of self-interest, there would result the greatest abundance of products and the greatest industrial development, and, in consequence, "the best state possible [for] the greatest possible population."

¹²⁰ *L'ordre*, pp. 20-21, 26; also Daire ed., pp. 523-24.

Population could and would grow in number and comfort only on condition that agriculture steadily improved, Mercier reasoned. Such progress was being checked by circumstances which were diverting expenditure and income from agriculture and thus reducing investment and production therein,¹²¹ by unsound taxes,¹²² by excessive outlay upon decorative luxuries,¹²³ by restrictions upon the exportation of the products of the soil,¹²⁴ and by a deficiency of effective purchasing power. (Had Mercier expressed himself in modern terminology, he would probably have attributed this lack of purchasing power to disequilibrium and to the resulting unemployment of some factors of production.) He also believed that this deficiency in purchasing power (which produced misery, destroyed population, and could not be cured by laws against mendicancy) would disappear, were the net product in agriculture to increase and set up the social motion necessary to restore interoccupational equilibrium; and that, were appropriate advances made in agriculture, productivity, whose "highest possible degree . . . will always remain unknown," would at least keep pace with numbers.¹²⁵

¹²¹ Since each "advance" of 100 in agriculture entailed a net product, or reproduction, of 200, the reduction of advances by 100 reduced "annual reproduction . . . 200; it is necessary indeed that consumption, and in consequence, the population, diminish in proportion" (*L'ordre*, Daire ed., pp. 496-97).

¹²² A tax of 100 reduces reproductivity by 200, half of which would have been spent for nonagricultural goods and services, and half in agriculture (*ibid.*, pp. 496-97, 499, 512, 518).

¹²³ "It is the nature, and not the sum of expenditures, which constitutes luxury, . . . [i.e.,] wealth, the consumption of which is no longer able to make itself in any wise useful to reproduction" (*ibid.*, p. 630). Mercier, who denied that luxury could permeate a society founded upon private property, described luxury as a "cruel enemy of the human species, this monster, whose venom is so subtle, so active, that one is not able to throw the eyes upon it without feeling its mortal attacks; this perfidious tyrant which, under the deceitful cloak of public prosperity, hides the cadavres of the miserable whom it daily immolates" (*ibid.*, p. 630; see also pp. 543-45).

¹²⁴ Mercier refers here to the Cantillon type of argument to the effect that the non-exportation of primary products will increase "the mass of works of manual labor," thus augmenting "*the national wealth and the population.*" The "intention is excellent," but the "means . . . produce an entirely contrary effect; . . . *they cause national wealth and population to diminish.*" For if foreign buyers of primary materials are excluded, France loses the difference between what these products sell for in the presence and in the absence of foreign buyers; the return to agriculture, and therefore the proprietors' ability to make advances to agriculture, must be less; wherefore the net product of agriculture, the source of the demand for the products of industry, must fall (*ibid.*, pp. 595-96; his italics).

¹²⁵ *Ibid.*, pp. 483-84, 523, 543, 545, 595.

Baudeau, a vulgarizer of physiocracy, dwelt upon the need of augmenting the capital supply and improving the methods of production in agriculture, if population were to grow and its lot to improve. Although he believed that, in general, the growth of production preceded the growth of population, he recognized that the ratio of numbers to resources might vary, and asserted that in most parts of Europe, the rural areas were overcrowded, given the then prevailing methods of agriculture. Improvements in the methods of cultivation would greatly increase production per cultivator, however, and ease the existing population pressure.¹²⁶

Baudeau condemned the diversion of capital from agriculture by unsound taxes, and by excessive consumption of nonagricultural products,¹²⁷ and indicated that such diversions reduced "propagation and . . . well-being."¹²⁸ Were agricultural production to expand, men would increase in number and comfort; for it was generally true that men tended to increase in number, in happiness, and in dignity, in proportion as landed property was improved, the arts progressed, liberty spread, and there were respect for and conformity with "the beneficent order of nature."¹²⁹

¹²⁶ *Introduction*, pp. 703-04, 720. See also Baudeau's statement that agricultural production, and not the number of men, is the index of the power of the state (p. 705).

¹²⁷ *Ibid.*, pp. 709-10, 735-37. He admitted that luxury, which he defined as "an excess of sterile expenditures," temporarily enriched the sterile classes; but he contended that in the longer run such excessive expenditures deprived agriculture of capital, shrunk agricultural production, and thus injured all classes (*ibid.*, pp. 735-36). Baudeau tried to specify exactly when expenditure for nonagricultural products is *luxure*, or an "inversion of the natural order." When a state is "most flourishing"—that is, presumably, when agricultural production cannot be further increased—proprietors must continually reinvest enough capital to maintain agricultural production at the maximum level. If, for any reason, the land deteriorates, proprietors are bound to increase their rate of investment sufficiently to restore the maximum level of production. *Luxure* exists in the first situation if the level of agricultural production falls because too much of the disposable revenue of the proprietors is diverted to the purchase of nonagricultural products; in the second, if the rate of investment is not as high as possible. The right rate of investment tended to be realized when economic liberty prevailed and the single tax on the net product was the sole source of state revenue (Baudeau, *Principes de la science morale et politique*, 1767, ed. with Introduction by A. Dubois, Paris, 1912, pp. xii-xix, 3-4, 12-15, 19-26). In 1783 Baudeau included under *luxure* whatever diminished an individual's "capital fund" ("Nouveaux éléments du commerce," *Encyclopédie méthodique*, Commerce, I, LXIX, Paris, 1783, p. xxiv).

¹²⁸ *Introduction*, p. 710; also his *Explication du tableau économique*, in Daire, *Physiocrates*, pp. 822 ff.

¹²⁹ *Introduction*, p. 820; *Encyclopédie méthodique*, LXIX, viii-ix, xiv-xvi, xxvii.

He admitted that those who were in need through no fault of their own had a right to assistance.¹³⁰

Le Trosne believed that population "proportions itself always to the means of subsistence, although it exceeds them more often than it remains below them"; but he did not consider such pressure of population inevitable, attributing it to deviations of the actual order from the "natural order" of social arrangements. Moreover, like Quesnay, he denied that mere population is the measure of a state's military power, and asserted that increments of population which could produce no more than, or less than, their own subsistence were useless to the state.

Do not then desire an increase of population when that which exists already forms a surcharge, and why seek the multiplication of men to doom them to misery and rigorous privations. There are always enough men when employment and the wages necessary to let them live with a sort of comfort are lacking. It would then be a plague and a terrible surcharge for the kingdom to introduce into it today a million men who had only their hands.¹³¹

In accordance with the precepts of the physiocratic school, Le Trosne reasoned that whatever encouraged investment in agriculture and augmentation of net agricultural production, would contribute to the growth of population and the increase of its comfort and well-being.¹³² Therefore he condemned, as did Quesnay and others, conditions which reduced the demand for agricultural products, caused the actual order to deviate from the natural order, and thereby checked the growth of population and the improvement of the human lot:¹³³ thus, he decried indirect taxes on labor, consumables, and raw material exports;¹³⁴

Baudeau postulated an initial stage of *increasing* average returns in agriculture under static conditions, and suggested that because of technological progress there might be no upper limit to the "fecundity of agriculture" (*Principes*, pp. xiv-xv, 13-14).

¹³⁰ *Idées d'un citoyen sur les besoins, les droits et les devoirs des vrais pauvres* (Paris, 1765), pp. 5, 10, 89.

¹³¹ *De l'intérêt*, p. 897; J. Mille, *Un physiocrate oublié: G. F. Le Trosne* (Paris, 1905), pp. 141-42. I have usually translated "bras" as "hands."

¹³² *De l'intérêt*, pp. 897, 970.

¹³³ *Ibid.*, pp. 895-97, 938, 942-43, 948.

¹³⁴ *Ibid.*, pp. 897-98, 903, 970, 998.

decorative luxuries;¹³⁵ and restrictions upon the exportation of raw materials and provisions.¹³⁶

Dupont, the godfather of the physiocratic school and its only important member to live to comment upon Malthus' essay,¹³⁷ supported Quesnay's views in large part, and tried to minimize the differences between the doctrines of Smith and those of Quesnay.¹³⁸ In 1766, in a criticism of Expilly's view that a state's population constituted the index of its wealth and power, Dupont stated that what was of consequence to a state was neither its population nor its armed forces (for a country could obtain whatever number of troops it had the wealth to hire), but the living conditions of the population and the resources which that population was able to extract from the soil; that it was necessary, through the establishment of economic and political liberty, to increase the production of subsistence more rapidly than population in order that multitudes then in poverty might have their lots improved.¹³⁹

Several years later Dupont expressed much the same view, saying that man desires invincibly and naturally "to propagate his species, to procure satisfactions, and to avoid suffering and privation as much as possible," and that the happier men are, the

¹³⁵ Excessive "luxe de décoration [is] prejudicial to landed expenditures and the amelioration of the soil which is neglected" (*ibid.*, p. 929). Le Trosne did not even favor the production of luxuries for foreign consumption, saying that such industries did not provide sufficient demand for domestic raw materials, and, in addition, were as likely to corrupt the domestic *mœurs* as those of the countries to which the luxury products were delivered (*ibid.*, pp. 953-54; also Mille, *op. cit.*, pp. 146-49).

¹³⁶ *Ibid.*, pp. 970-72, 993-98. Freedom of trade, Le Trosne admitted, would augment the prices of raw materials; but "everything that tends to favor cultivation and to augment the revenue of a nation, tends to multiply wages, labor, and consumption" (*ibid.*, p. 995). See also Mille, *op. cit.*, pp. 113-25.

¹³⁷ *Examen du livre de M. Malthus* (Philadelphia, 1817). This includes the four chapters on physiocracy, left out of the first French translation (1809) of Malthus. Dupont's main discussions of the population problem during the ascendancy of physiocracy appeared in the *Journal de l'agriculture* and the *Ephémérides du citoyen*, which he successively edited (1765-72).

¹³⁸ E. Allix, *R. H. S.*, V (1912), 323. In an obituary of Quesnay, prepared in 1805, Dupont did not employ such terms as *classe sterile*, *produit net*, etc.; he looked upon the augmentation of capital as the principal means of increasing work (Oncken, p. 805 n.; G. Schelle, *Du Pont de Nemours et l'école physiocratique*, Paris, 1888, p. 374). In letters to Jefferson in 1812 Dupont did not use the term *classe sterile*; but he did use the term *produit net* and adhered to the physiocratic theory of production (*Correspondence*, pp. 179-99).

¹³⁹ Cited in G. Schelle, *Du Pont de Nemours*, pp. 38-39.

more will their number increase.¹⁴⁰ Accordingly, the state would be prosperous, men would be happy, and numbers would grow, in proportion as the system of taxation was modified, and investment was carried out, along physiocratic lines and in a manner to make the net product of agriculture as great as possible.¹⁴¹ The type of tax most suited to achieve these ends and to conserve liberty and property was, in Dupont's opinion, a proportional tax on the net product.¹⁴²

Although Dupont clearly recognized the tendency of returns to diminish at the extensive margin,¹⁴³ his optimistic faith in technological and social progress led him to anticipate fewer difficulties than Quesnay from population growth. In 1771 he wrote that since Providence has implanted in man, as in all animals, a strong propagative urge, "the effect of the multiplication of productions that cultivation gives birth to is to assure the multiplication of the human species. . . . This propagation is never limited but by the difficulty of subsistence; sole natural obstacle to the natural torrent which pours upon the earth the animated beings."

Wherever productive possibilities are great, and men are secure in their rights, the rate of natural increase will be high and immigrants will come from badly governed lands. Thus in the American colonies population was doubling every twenty-five

¹⁴⁰ *De l'origine et des progrès d'une science nouvelle* (1768), Daire ed., pp. 343, 346. In his *Abrégé* the fundamental physiocratic philosophy is outlined, but no attention is devoted to population. In *Notice abrégée* (Oncken, p. 153), a summary history of the writings which contributed to the formation of the physiocratic doctrine, and which was originally published in the *Ephémérides* in 1769, Dupont criticized Mirabeau for saying in *L'ami des hommes* that population is "the source of wealth, and not wealth . . . the cause of the population."

¹⁴¹ *De l'origine*, pp. 343-46, 351, 353-54; also p. 391, where, in a summary of Quesnay's maxims, Dupont stresses economic use of the factors of production.

¹⁴² *Ibid.*, pp. 351, 354, 357, 364; see also *Correspondence of Jefferson and Du Pont de Nemours*, pp. 131, 154, 159, 173-76, 180 ff.

¹⁴³ In 1768 (*De l'origine*, p. 352) Dupont asserted that if a tax were imposed, not upon the net product, but in such a way as to increase the expenses or decrease the gross incomes of all cultivators, the latter "would then be forced to abandon the cultivation of bad or mediocre fields, which, before the diminution of the price of products, rendered only little or nothing above the reimbursement of the expenses of their exploitation, and which, by this diminution of the value of the harvests, would no longer be able to reimburse the expenses necessary for their cultivation. From that would come a primary and notable diminution in the total mass of subsistence, in the comfort of the people, and shortly in the population." See also *Correspondence*, p. 131.

years, because cultivation progressed unceasingly and the quantity of consumables increased every day.¹⁴⁴ Population might even grow more rapidly than the supply of subsistence; but if it did, and if, as a consequence, wages and income were depressed, this condition would not persist. The competition of large numbers excited the "perfectibility of the human spirit," which, together with the desire of man to obtain as much as possible for as little expenditure as possible, stimulated and continued to stimulate the ingenious inventions which in the course of history had raised the economic status of the poorest of civilized men far above that of savages.¹⁴⁵ Dupont thus appears to have been more optimistic concerning the future than others of Quesnay's school.¹⁴⁶

H. Pattullo, perhaps the most slavish of Quesnay's disciples,¹⁴⁷ emphasized the population-augmenting effect of agricultural progress, suggesting that, given freedom of commerce in grain, agricultural education and progress, and the removal of the then existing burdens upon agriculture, France's yield might be increased over elevenfold.¹⁴⁸ Employing Quesnay's type of analy-

¹⁴⁴ This estimate was probably based upon Benjamin Franklin's works. See the writer's discussion of early American population estimates in *American Economic Review*, XXV (1935), 691 ff.; *American Sociological Review*, I (1936), 905 ff.

¹⁴⁵ See Schelle, *op. cit.*, pp. 121-23, 389, for citations from Dupont. In the Preface to his *Examen* (see n. 137) Dupont declared that Malthus was too pessimistic; that the poor would not practice moral restraint; that population pressure spurred men to increase production. America need not fear population growth for 600-1,000 years at least (*Correspondence of Jefferson and Du Pont de Nemours*, pp. 241, 244, 255). Dupont later modified his emphasis upon *produit net* and stated that the continual growth of industry is a potential source of danger to a nation only if unaccompanied by adequate growth of agriculture (e.g., England). See Schelle, *op. cit.*, pp. 77-79; *Correspondence*, pp. lvi-lviii, 240-56, esp. pp. lvii, 241, 244, 253, 255; also *ibid.*, pp. 198-99, where the evils of modern industrialism are forecast.

¹⁴⁶ Dupont admitted that the provision of aid to the poor was a proper function of the state, but insisted that the aid be in the form of employment if possible, and relief be granted only if the family of the needy individual could not come to his aid (*Idées sur les secours à donner aux pauvres malades dans une grande ville*, Paris, 1786, pp. 10-16; Schelle, *Du Pont de Nemours*, pp. 117-18).

¹⁴⁷ In his *Essai sur l'amélioration des terres* (Paris, 1758), written perhaps as early as 1756, Pattullo not only drew heavily upon Quesnay's *Grains* and *Fermiers*, but even reproduced that part of his unpublished *Hommes* dealing with need for freedom in the grain trade. Most of the *Essai* is concerned with means of increasing agricultural productivity.

¹⁴⁸ *Essai*, pp. 259-66. Elsewhere (*ibid.*, p. 248) he seems to suggest that France could nourish treble her then population.

sis, Pattullo concluded that, given a good market for agricultural products and proper reinvestment in agriculture, the annual revenue of France could be increased sufficiently, within twenty years, to support ten million more people.¹⁴⁹

That population tends to grow rapidly when economic and agricultural conditions are propitious, Pattullo did not question. He pointed to the demographic growth of the population in the British colonies in America, where food was plentiful, men married early, and the population doubled every twenty to twenty-five years.¹⁵⁰ In the absence of pestilence, famine, war, and similar obstacles, and in the presence of a climate "little subject to contagious maladies," men living in a land of abundance might double their number in less than twenty years.¹⁵¹ Moreover, immigrants tended to be attracted to countries whose agricultural proprietors were prospering.¹⁵²

To accelerate population in a country it is necessary to facilitate there the increase of wealth, because men are attracted by it, & by the facility of acquiring it; population increases in consequence of the augmentation of wealth, and the increase of wealth is perpetuated through the augmentation of population. But the progress of wealth is arrested in a great State, when agriculture ceases to be sustained by the market for its products, the sole source [of wealth]; and if this market is limited to the subsistence of the nation, agriculture will be limited by the state of the population, & population will be limited by the state of agriculture; for population is able to increase only through progress in the wealth of agriculture, & agriculture is able to progress only through an increase of commerce which assures the sale of its superfluity; without this facility, products become dirt cheap, the expenses of cultivation cannot be met, lands become valueless, the mass of revenues diminishes & the population with them.

Le bon prix of provisions, I say more, even dearness (*cherté*), constantly maintained by a facile commerce, far from ever producing destructive effects, would rather provoke abundance; for wages and earnings are

¹⁴⁹ *Ibid.*, pp. 235-45.

¹⁵⁰ *Ibid.*, pp. 241-47.

¹⁵¹ *Ibid.*, pp. 247-48. Pattullo refers to Petty's work on the multiplication of men, and to M. Whiston's *Théorie de la terre*. Pattullo observed (*Essai*, p. 248) that the marriage rate was much higher in rural areas than in cities "where vices and accidents of all sorts hinder propagation." Hence he suggested that the dowers of the rich could better be used to encourage marriage in rural areas (*ibid.*).

¹⁵² *Ibid.*, pp. 248-49.

proportioned in all professions to the price of provisions, provisions multiply in proportion as one is excited by their price to cultivate them, & their abundance augments more and more wealth & population.¹⁵³

How long successive advances in agriculture, excited by *le bon prix*, would continue to augment agricultural production, Pattullo did not specifically say. As has been noted, he believed the possibilities for expansion to be great in France. He observed, in general, that "the progression of these increases of revenue & of population can be extended as long as our territory & the reestablishment of good cultivation are able to provide for the increase of production: for a nation is able to become more wealthy than another nation with the same facilities for commerce only so long as it surpasses it in landed property."¹⁵⁴ He supposed, in short, that so long as additional returns were obtainable at all, the average rate of returns would either increase or remain constant.

The demographic views of Abbé A. Morellet, a disciple of Gournay, resembled in many respects those of the physiocrats, and may, therefore, be treated here.¹⁵⁵ In 1770 Morellet observed, as had the physiocrats, that population normally grows when agricultural production expands, and when the capital investment in agriculture and manufacturing increases.¹⁵⁶ He said, further, that agriculture was not only the "prime mover" in the economy, but was susceptible of far more expansion than manufacturing, whose growth was necessarily limited by the size of the domestic and foreign markets for manufactures.¹⁵⁷ Like the physiocrats, he did not favor unduly rapid population growth. "It is not precisely the increase of population that one must have in view,

¹⁵³ *Ibid.*, pp. 244-46. *Cherté* does not signify an *excessive* price, apparently (Weulersse, II, 521, n. 2).

¹⁵⁴ *Ibid.*, p. 241.

¹⁵⁵ In 1769 in his *Prospectus d'un nouveau dictionnaire de commerce* (Paris), later brought out by Peuchet, Morellet merely listed checks to population growth (*ibid.*, pp. 210-11). Morellet was familiar with the works of Franklin, Turgot, and Richard Price on population, with many French studies, and with English discussions of mendicity (*ibid.*; also *Mémoires inédits de l'abbé Morellet*, Paris, 1822, I, 203, 310; *Lettres de l'abbé Morellet à Lord Shelburne, 1772-1803*, Paris, 1898, p. 16).

¹⁵⁶ *Réfutation de l'ouvrage qui a pour titre: Dialogues sur le commerce des blés*, first printed in 1770, but not published until 1774, pp. 212-13. This work constituted a reply to Abbé Galiani's antiphysiocentric *Dialogues sur le commerce des blés* (Paris, 1769). On Galiani's relation to the grain controversy in the eighteenth century, see C. J. Gignoux, *R. H. S.*, X (1922), 17-37.

¹⁵⁷ *Réfutation*, pp. 193-97, 212-13.

it is the greatest quantity of satisfactions combined with the greatest number of men. The best state of a nation is not that where the land is covered with men eating bread and drinking water, and all reduced to the most restricted subsistence."¹⁵⁸

Many years later (1806) Morellet commented favorably upon Malthus' *Essay*, the best work, in his opinion, on population. He admitted the tendency of numbers to outstrip the food supply, but questioned whether men in warmer climates could practice moral restraint in a sufficient degree to check population growth. He especially commended Malthus for refuting the "great and harmful error" that the state is obligated to succor the poor.¹⁵⁹

III

The wage theory of the physiocrats was in essence but a corollary to their demographic theory. For they believed, in general, that although "natural," or "artificial," scarcity at times pushed the wages of some workers above the "normal" level, the "normal" or "natural" level of money wages was governed by the pecuniary cost of living; and that, whatever might eventually happen to the size and content of the wage-determining real living budget, wage earners in Quesnay's day usually received little, if anything, more than the bare necessities. This opinion permeated their arguments that nonagricultural labor was sterile, that the trade in provisions ought to be free, and that all taxes were ultimately incident upon the net product.

That wages in agriculture provided nothing but bare subsistence is implicit in the physiocratic analyses of the state of French agriculture; it is explicit in Mercier's observation that agricultural workers receive only that which "one may regard as scanty necessity." Mercier attributed this situation to the fact that agricultural labor was simple and performable by a multitude of propertyless persons. "The great competition of these workers who are formed quickly and without expense keeps their wages at the lowest possible price, . . . at a price below which one finds only indigence and misery, scourges always destructive

¹⁵⁸ *Ibid.*, p. 58. Like Baudeau, he condemned the granting of charity to idle workers so long as land remained uncultivated, and there was need for soldiers and sailors (Weulersse, I, 589).

¹⁵⁹ *Mémoires*, II, 155-57. In *Lettres* (p. 172) Morellet observed that the standard of life tends to vary.

of the classes of men for whom they constitute the habitual state."¹⁶⁰

Laborers in "sterile" industry and commerce tended to receive little, if anything, more than the agricultural laborers, according to the physiocrats—merely enough on which "to live and support their families," according to Weulersse's interpretation.¹⁶¹ Thus Quesnay wrote:

Compare the earnings of workers who fabricate the products of industry with that of the workers that the husbandman employs in the cultivation of the soil, you will find that the earnings, on all sides, are limited to the subsistence of these workers; that this earning is not an augmentation of wealth; and that the value of the works of industry is proportioned to the value even of the subsistence that the workers and the merchants consume. Thus, the artisan destroys as much in subsistence as he produces by his labor.¹⁶²

The payment to labor of more than the worker's subsistence, or cost of living, was not only rare but explainable solely in terms of instructional costs, or of imperfections in the competitive process. Quesnay attributed such excesses, when they existed, in small part, to the scarcity of artistic labor (e.g., painters) and to the competition-checking effect of governmental grants of exclusive occupational privileges; in large part, to the fact that outlays for education and apprenticeship needed to be liquidated.¹⁶³ Le Trosne shared this opinion.¹⁶⁴ Neither Quesnay

¹⁶⁰ *L'ordre naturel*, pp. 499-500; also p. 494.

¹⁶¹ I, 290. Strictly speaking, the physiocrats considered no labor to be productive of a net product above expenses (*ibid.*, II, 689-90). However, the land used in conjunction with agricultural labor did yield a net product, whereas nonhuman agents used in conjunction with nonagricultural labor did not yield a net product, according to physiocratic reasoning. Agricultural workers differed from nonagricultural workers, moreover, in that the former were paid out of the nondisposable wealth which the cultivator had to deduct from the gross product before sharing with the sovereign and the landed proprietors; nonagricultural workers were remunerated out of the net product—in a stable economy, out of that half of the net product which could be distributed among the owners of "sterile" agents. See, for example, Mercier, *L'ordre*, pp. 496-97, 499.

¹⁶² Quesnay, Oncken, pp. 233-34. The same opinion appears less explicitly in Mercier, *L'ordre*, chaps. xvi-xvii; Baudeau, *Introduction*, chaps. iv-v; Le Trosne, *De l'intérêt*, pp. 936-45.

¹⁶³ "But do not here confuse the labor of those of whom the professions require very long and expensive studies; or you would forget to take account of these great expenses in the price of their works" (Oncken, p. 534).

¹⁶⁴ "If artists are paid in excess of indispensable expenses, it is that in consequence of their talent and of the studies which they have made, they have a right to a

nor Le Trosne explicitly converted his arguments into terms of supply and demand, however.¹⁶⁵ Dupont and several, lesser, physiocrats explained the excess in terms of monopoly and exclusive privilege.¹⁶⁶ Mirabeau admitted that the "fantasy," or "opinion," of buyers sometimes led them to pay more for a good than the embodied outlays for labor and materials, but said that such cases were rare.¹⁶⁷ Mercier said that while competition generally prevented the sale of fabricated products abroad for more than their "necessary" price,¹⁶⁸ the labor embodied therein could command a price in excess of the outlays for its subsistence "only in the case where a unique and superior talent would have no competitors."¹⁶⁹

In their defense of the removal of restrictions upon freedom of trade in grain and provisions, the physiocrats evidence a "profound conviction . . . that there exists between the price of cereals and that of labor a necessary proportion, that nothing can alter."¹⁷⁰ Quesnay's view is typical: "The good ordinary price of grain . . . is not prejudicial to the common people. A man consumes three setiers of grain: if, because of the good price, he paid four livres more for each setier, this price would augment his expense one sou per day at most; his wage also would augment in proportion. . . ."¹⁷¹ A given rise in the price of grain would be accompanied by a corresponding rise in wages, provided the advance in the price of grain was not sudden and unforeseen.¹⁷²

greater consumption than ordinary workers, and they demand so much the more as they have the less of competitors. But, if they seem to obtain a sort of net product, *they do not produce it*, they get it; and this surplus value, which is for them a benefit, is one expense more for buyers" (*De l'intérêt*, p. 945).

¹⁶⁵ J. J. L. Graslin (*Essai analytique sur la richesse et sur l'impôt*, London, 1767, p. 247) argued that wages could go up, in consequence of some condition such as a tax upon workers, only provided that this condition made the workers diminish in number. See also Weulersse, II, 354, 356. For a general analysis and description of physiocratic and other wage theories see Chapter IX, sec. ix.

¹⁶⁶ See citations in Weulersse, I, 298, 303. Industry when not sterile, the physiocrats reasoned, was "spoliatrice" (*ibid.*, p. 304).

¹⁶⁷ *Philosophie*, chaps. x-xi; also Weulersse, I, 292-97.

¹⁶⁸ "The necessary price of a piece of work consists of the disbursements made by the worker for the purchase of primary materials, and of the sum total of all his consumption during his work" (Mercier, *L'ordre*, p. 590).

¹⁶⁹ *Ibid.*, p. 588.

¹⁷⁰ Weulersse, II, 554.

¹⁷¹ Oncken, pp. 247-48, also p. 271. For similar opinions see Mercier, *L'ordre*, p. 501; Baudeau, *Introduction*, p. 709; Le Trosne, *De l'intérêt*, pp. 951-52; citations from Dupont and Mirabeau, in Weulersse, II, 554-55.

¹⁷² See citations from Mirabeau and Dupont (Weulersse, II, 554-55). The phys-

In their discussions of the effect of an advance in grain prices upon wages, several of the physiocrats rejected the seeming corollaries to their basic argument, namely, that real wages tended to remain constant, and that the laboring class did not stand to gain from an advance in grain prices. These physiocrats asserted, first, that even though a given rise in the price of grain tended to be accompanied by a corresponding rise in money wages, real wages nevertheless increased, inasmuch as the prices of other provisions did not increase in the same proportion as the price of grain. Thus Quesnay wrote that the

. . . wage per day of the worker is ordinarily one-twentieth of the price of a setier. On this basis, if grain were estimated at 30 livres, the worker would earn about 260 livres in the course of the year; of this he would spend on grain, for himself and family, 200, and there would remain to him 60 for other needs. If, on the contrary, the setier of grain were valued at only 15 livres, he would earn only 130 livres, would spend 100 of it for grain, and there would remain to him for other needs only 30. . . . The provinces where grain is dear are much more peopled than those where it is at a low price.¹⁷³

They asserted, secondly—and this assertion is corollary to their basic defense of freedom in trade in provisions¹⁷⁴—that employment tended to be greater when grain prices were high than when they were low, because (1) the beneficiaries of high grain prices (i.e., proprietors) did not hoard their gains, as did the beneficiaries of low grain prices, but spent freely;¹⁷⁵ (2) the market for labor was better and workers were more prone to work when grain prices and money wages were high.¹⁷⁶ They supposed, finally, that even though an advance in grain prices entailed an advance in wages, manufacturing and export industries would not be depressed thereby, as certain critics held.¹⁷⁷

physiocrats eventually were obliged to recognize that wages did not always advance immediately upon an increase in the price of grain, and that sometimes they did not advance at all (*ibid.*, pp. 560, 566).

¹⁷³ Oncken, p. 354. See similar statements of Abeille and others, cited by Weulersse, II, 555-56.

¹⁷⁴ See n. 53, above.

¹⁷⁵ Cultivators 'naturally' reinvested their profits, Quesnay believed (Oncken, p. 545). See also similar statements of other writers cited by Weulersse, II, 550-51.

¹⁷⁶ See citations from Quesnay, Mirabeau, and Vauvilliers in Weulersse, II, 556, 566-67; also views of Dupont and Abeille in work edited by Depitre (see n. 53, above), pp. 26, 29, 69, 99, 126.

¹⁷⁷ Argenson, Morellet, Des Vertus, and others said that since an advance in grain

For they reasoned that well-paid workers were much more productive than badly paid workers, thus implying that an increase in wages might be accompanied by a decline in labor cost per unit of output;¹⁷⁸ that establishment of "le bon prix" of grains would entail an advance of only 2½ to 5 per cent in the monetary price of labor;¹⁷⁹ and that since the market for manufactures was always best when the price of grain was high, any advance in the price of manufacturing labor attributable to an advance in the price of grain would be more than compensated by the resulting improvement in the market for manufactures, at home or abroad.¹⁸⁰

In consistency with their thesis that all taxes were ultimately incident upon land, the sole source of a net product, the physiocrats had to maintain, and did maintain, that any tax upon workers, or upon the provisions of workers, resulted in a corresponding increase in the monetary wages of workers. Thus Quesnay observed: "An imposition on workers who live on their wages is, rigorously speaking, only an imposition on labor, which is paid by those who employ workers, even as a tax on horses which work the soil is really only a tax on the very expenses of cultivation."¹⁸¹ Dupont, Mirabeau, Baudeau, Le Trosne, and Mercier reasoned in a like manner that the working population was immune from taxes, inasmuch as any taxes immediately incident upon workers necessarily entailed a counterbalancing advance in money wages.¹⁸²

prices entailed an advance in money wages, labor costs in French manufacturing and export industries would rise, thus placing these industries at a disadvantage in international trade, depressing them, and conducing to worker emigration (Weulersse, II, 408-09).

¹⁷⁸ Mirabeau, *Philosophie*, chap. ix. This seems also to have been the view of Quesnay and other members of the school. Abeille, who apparently supposed that money wages were sticky, said that a low grain price favored only those entrepreneurs who could put pressure on workers and reduce their wages, thus swelling profits. See citations in Weulersse, II, 542.

¹⁷⁹ Quesnay (Oncken, p. 248).

¹⁸⁰ Mirabeau, *Philosophie*, chaps. viii-ix; Quesnay, Oncken, p. 247; also Weulersse, II, 409-12, 539-43. Boisguillebert, Melon, Herbert, and other predecessors of the physiocrats had contended that lack of prosperity for workers, and in industry, was associated with a low price of grain (*ibid.*, II, 541). No distinction was made between grain prices low because of the trade cycle and those low for other reasons.

¹⁸¹ Oncken, p. 338; see also pp. 706-07.

¹⁸² Mirabeau, *Philosophie*, chap. ix; Mercier, *L'ordre*, pp. 499-501, 504, 512, 518; Le Trosne, *De l'intérêt*, pp. 948, 998; Baudeau, *Introduction*, pp. 709-10; Dupont, *De*

It is evident, in view of the arguments presented, that the physiocrats believed the downward pressure upon the wage level to be very great. In fact, Weulersse concludes, they supposed that intense competition "naturally" reduced the level to a low minimum.¹⁸³ Concerning the possible sources of this pressure they were not very explicit. They virtually ruled out pressure from either an internal or an external industrial reserve army. With respect to the influence of an internal industrial reserve army, they made but two pertinent comments: (1) that technological progress did not tend to augment unemployment;¹⁸⁴ (2) that state or municipal support of the able-bodied idle caused many of these to avoid work and diminished the effectiveness of the competitive process.¹⁸⁵ Presumably, they believed the presence of unemployed idle to exercise a depressive effect upon wages; but they were not explicit in their analyses. In their discussions of migration the physiocrats developed no theory of an external industrial reserve army, merely asserting that favorable agricultural conditions attracted immigrants, and that unfavorable conditions (e.g., taxes) caused men to emigrate to other places.¹⁸⁶ In general, then, judging from their lack of emphasis upon the depressive effects of an internal or an external industrial reserve army, and from their acceptance of the view that popula-

l'origine, pp. 351-54; Weulersse, I, 291, 353; also n. 51 above. Vivens believed that even a tax on luxuries consumed in the cities would fall in a large measure upon land, inasmuch as most urban luxuries embodied landed products. See citation in Weulersse, II, 359-60. Baudeau, Dupont, and Le Trosne, among others, reasoned in an analogous fashion when they traced out the effects of a diminished demand for agricultural products. Dupont defended this physiocratic theory long after Smith and Say had written (*Correspondence of Jefferson and Du Pont de Nemours*, pp. 183-93, and note to Turgot's *Réflexions*, in E. Daire, ed., *Œuvres de Turgot*, Paris, 1844, I, 68-71).

¹⁸³ Weulersse, I, 589; II, 687, 727-30. Competition, which fixed wages as low as "social circumstances" allowed, caused free labor to be less expensive than slave labor, said Dupont (*Correspondence*, p. 188).

¹⁸⁴ E.g., Quesnay, Oncken, pp. 265-66. The physiocrats assumed that since labor-saving devices reduced the cost and price of merchandise, sales opportunities would always expand sufficiently to permit at least the same level of employment. Unemployment attributable to technological change was only temporary, they believed, tending to disappear most rapidly in smaller communities where displaced workers could more easily discover new employment (Weulersse, II, 552-53).

¹⁸⁵ See comments of Baudeau, Roubaud, and Morellet in Weulersse, I, 589-90. On the prevailing attitude toward the rights of man to subsistence see Chapter VII.

¹⁸⁶ E.g., Quesnay, Oncken, pp. 187, 208, 246, 706-07; Mirabeau, *Philosophie*, chap. ix.

tion tends to grow as the supply of subsistence expands, the physiocrats found the main source of downward pressure upon the general wage level in the strong procreative proclivities of man;¹⁸⁷ and they viewed migration primarily as an equalizer of local wage levels, and not as an important determinant of the general level.

It is evident that the physiocrats believed the wage level to be resistant in the long run to downward pressure, provided that the economy was not in a state of retrogression.¹⁸⁸ While it is not wholly clear how downward pressure was to be stabilized, it is inferable that the mechanism of adjustment was essentially demographic in character. Of emigration, as a wage-preserving factor, they said little, except to suggest that relatively nonprosperous sterile industries and workers tended to emigrate,¹⁸⁹ and to indicate, as has been shown, that agriculturalists tended to abandon depressed agricultural areas. Concerning the tendency of infrasubsistence wages to diminish the working population, they were more explicit. For example, Baudeau reasoned that if, following a tax upon agricultural workers, their wages were not increased by the amount of the tax, "it is necessary to suppose that this precious race becomes more miserable each day; that its lot is rendered harder, its existence more sad and more painful; in this case, it is evident that it is depeopled, that it is discouraged, that it loses emulation, industry, vigor. . . ."¹⁹⁰

Mercier asserted that, in event of a tax on wage earners uncompensated by an increase in wages, men could escape destruction only if they were able to obtain subsistence at a correspondingly reduced price; that if, after a tax had been imposed upon them, the wages of wage earners were not raised, "you will necessarily see this species of men destroyed," for they will be living in "a

¹⁸⁷ Weulersse (II, 553) subscribes to this opinion.

¹⁸⁸ A decline in the money income of a nation, originating in depressed agricultural conditions or in a state of internal disorder, entailed in order a cumulative decrease in the demand for products, in population, in the demand for products, in population, and so on, until the original cause was removed (Mercier, *L'ordre*, pp. 496-97, 504; also Le Trosne, *De l'intérêt*, pp. 897, 948).

¹⁸⁹ Mercier, *L'ordre*, p. 518; Le Trosne, *De l'intérêt*, p. 953; also Weulersse, I, 281-86.

¹⁹⁰ *Introduction*, pp. 709-10. He states also (*ibid.*, p. 710) that "propagation" is checked. See also Oncken, pp. 706-07.

state of *excessive* misery, a state *homicidal* for men born and to be born."¹⁹¹

Although most of the previous citations suggest that the physiocrats did not believe real wages to provide more than a scanty subsistence, or to be susceptible of increase, other statements in their writings reveal the belief that real wages not only tended to exceed the subsistence level when a nation's economy was well ordered, and its agriculture was prosperous, but were susceptible of some increase through time as agriculture progressed. In a well-ordered state, wages suffice to provide more than mere subsistence, Mercier observed.¹⁹² Given increased agricultural production, Dupont believed, wages could exceed subsistence and would increase.¹⁹³ Le Trosne implied that workers "are forced to give their time at the lowest price" only when agriculture is depressed; that a representative weaver commonly received enough wages to subsist his wife and children, provide them with clothing and shelter, and supply himself with a reserve in case of accident.¹⁹⁴ Quesnay, as has been shown, declared that wages might exceed the subsistence level, and would increase somewhat as agriculture became more prosperous.¹⁹⁵ Mirabeau stated clearly that population growth did not necessarily tend to depress agricultural wages. "Expenditures always precede production; these expenditures to make advances elevate the price of labor, whence it no longer descends."¹⁹⁶

Wages would tend to rise, the physiocrats reasoned, if agricultural investment expanded and augmented the net product of agriculture, and the derivative "wages fund" of the landowners. Thus Le Trosne wrote:

In a wealthy nation whose land is of great value, there is an abundance of wages; in a poor nation . . . there is less of it and the sum which exists is so divided by the competition of those who are eager to share

¹⁹¹ *L'ordre*, pp. 499-500. Dupont expresses a somewhat similar opinion (*De l'origine*, pp. 352-54); elsewhere (*Correspondance*, p. 188) he declares that free labor costs the employer even less than slave labor.

¹⁹² *L'ordre*, pp. 523-24. Other members of the school shared this opinion. See Weulersse, II, 553.

¹⁹³ *De l'origine*, pp. 343, 346, 353-54; Schelle, *Du Pont*, pp. 121-23, 163-64, 167.

¹⁹⁴ *De l'intérêt*, pp. 947-48.

¹⁹⁵ E.g., see Oncken, pp. 187, 263-65, 271, 335, 354.

¹⁹⁶ Cited in Weulersse, II, 553 n.

it that it barely suffices to procure to the worker the most scanty wage. . . . Is it not evident that the class which lives on wages only has the greatest interest that they be abundant; that wages, being able to be furnished only by reproduction, are more or less abundant according to the state of cultivation. . . . The more these two classes [landed proprietors, cultivators] will have to expend, the more will there be of wages for the [common] people.¹⁹⁷

Substantially the same argument appears in the works of Mercier, Quesnay, Dupont, and Baudeau.¹⁹⁸

The physiocrats were concerned primarily with improving the lots of the cultivators and the landed proprietors, and secondarily with bettering that of the agricultural workers. They believed, too, that the bulk of the fruits of progress would and should go to cultivators and landed proprietors. Nevertheless, they sought the elimination of misery and some improvement in the positive economic condition of the masses; for they supposed that if wage earners received something beyond mere subsistence they would work harder and more skillfully, and provide a better market for farm products.¹⁹⁹ In Weulersse's words, based upon statements by Quesnay, Mirabeau, and others:

The advance of wages can proceed, moreover, either from the generosity, or from the fully understood interest of proprietors and of cultivators. "Misery entails only discouragement, and discouragement, indolence"; "the state of ease provokes to work." "Some extortioners have advanced as a maxim that it is necessary that *the peasants be poor in order to prevent them from being indolent*. The disdainful bourgeois have voluntarily adopted this barbarous sentence; but *the man who has nothing to conserve works only to earn that wherewith to nourish himself; on the contrary every man who is able to conserve is industrious, because every man is avid for wealth*." In this sense also the Doctor concluded: *Poor peasants, poor kingdom*. A certain ease among agricultural workers, among the mass of people in general, is equally indis-

¹⁹⁷ Le Trosne, cited by J. Mille, G. F. *Le Trosne*, pp. 143-44; see also *De l'intérêt*, chap. v, and pp. 895-97.

¹⁹⁸ Mercier, *L'ordre*, pp. 496-99, 518; Quesnay, in Oncken, pp. 310 ff.; Dupont, *De l'origine*, pp. 345-46; Baudeau, *Explication du tableau économique*, in Daire, *Physiocrates*, pp. 822 ff.

¹⁹⁹ On the attitude of the physiocrats toward the cultivators, proprietors, and workers, see Weulersse, II, 686-87, 689 ff., 727-33. See also Baudeau's attack upon serfdom and slavery and defense of the worker's right to unrestricted liberty in the sale of his labor (*Introduction*, pp. 706-09).

pensable to insure the advantageous sale of the products of the soil: is it not always "the purchaser who fixes the price for merchandise with the means that he has to spend?" The underselling and debasement of provisions on the internal market, or even the extension of inferior cultivations at the expense of rich cultivations, "there is the success of the ferocious maxims according to which it is necessary to reduce the common (bas) people to misery in order to force them to work." The Physiocrats required that the common (menu) people of the country enjoy an existence, not liberal assuredly, but honorable . . . they demanded that the peasants not be regarded "as the slaves of the State," and that there not be refused, even to the most humble, a minimum of instruction.²⁰⁰

Such required improvements in the lot of the worker, in especial in that of the agricultural worker, must come, the physiocrats asserted, not through any governmental interference with the competitive process, but through agricultural development within the framework of perfect competition.²⁰¹

²⁰⁰ Weulersse, II, 546-47; his italics.

²⁰¹ *Ibid.*, II, 545-46, 557. "Competition," wrote Mercier, "reigning peacefully in the midst of liberty, determines without violence, although despotically, the rights of the two classes of men, and conciliates them . . . perfectly" (*L'ordre*, p. 494).

CHAPTER VI

THE PHILOSOPHES

THE TERM "philosophes" is usually applied to the group of writers who, in eighteenth-century France, gave expression to the aspirations of the emerging bourgeois class. It is customary to include among the philosophes Voltaire, Rousseau, Diderot, Montesquieu, Turgot, Condorcet, D'Alembert, Helvétius, D'Holbach, the Abbé de Saint-Pierre, the Abbé Raynal, De Mably, Baron von Grimm, De Chastellux, Morellet, and Morelly. For the sake of convenience, however, Morellet is included with the physiocrats; Turgot, Rousseau, De Mably, and Morelly are placed with the nonphysiocrats; Buffon and several others, while not full-fledged philosophes, are treated in this chapter.

Those writers who are here classed among the philosophes fall roughly into three categories, in so far as politico-demographic theory is concerned: (1) Montesquieu, Voltaire, Raynal, and their followers, who discussed population questions at length, but remained comparatively conservative in politics; (2) Buffon and his disciples, who emphasized the biological rather than the cultural aspects of demography; (3) the Abbé de Saint-Pierre, Chastellux, Condorcet, and other exponents of the theory of progress.

I

Montesquieu (1689-1755), though filled with detestation of clericalism and despotism, and both a champion of tolerance and an opponent of unified sovereignty, was the most conservative of the philosophes. He did not share Saint-Pierre's optimism, nor his faith in the ease of reform; for he believed social phenomena to be interdependent, bound together by an "esprit général," and though conditioned by innumerable personal and impersonal factors, to be subject to general laws even as are physical phenomena and therefore not susceptible of easy alteration. His principal objective, apparently, was to restore the ancient liberties of the French people.¹

¹ He was influenced, as Martin shows (*op. cit.*, pp. 83, 148), by the *Loi civil* (1694)

Montesquieu's thoroughly sociological philosophy permeated his discussion of population problems in a marked degree.² He developed what, in many respects, was a cultural theory of population growth, treating such growth as the result of a multiplicity of complexly interrelated factors not readily amenable to legislative control. Later writers, however, were influenced less by his broad conception of the cultural determinants of population growth than by his individual and specific comments and observations.

Montesquieu's approach to the population problem implied criticism of the prevailing order, and acceptance of the belief—a belief which he helped to spread—that the population of France had diminished.³ For in both works he posited the question: Does the earth contain fewer people than formerly? This question he answered in the affirmative, suggesting in *Lettres* that certain checks to population growth had become more important than in earlier times, and in *Laws* that France's growth in size was depressing population growth even as had growth in size in Roman times.⁴ "Most countries of Europe were better peopled in those [Charlemagne's] days, than they are at present," he

of Domat (1625-96), in his youth a student of physics, who believed laws to be, not arbitrary, but the result of "general principles." See on Montesquieu, A. J. Grant, in Hearnshaw, *op. cit.*, pp. 114-35; H. Sée, *L'évolution de la pensée politique en France au XVIII^e siècle* (Paris, 1925), pp. 56-85.

² His principal treatments of population problems appear in his *Lettres persanes* (1721) and in his *L'esprit des lois* (1748). In his *Défense de l'esprit des lois à laquelle on a ajouté quelques éclaircissements* (Geneva, 1750), he repeated his argument that polygamy was conditioned by climate, denied that he had disapproved of religious celibacy, and condemned lay celibacy and libertinage (*Œuvres complètes*, Paris, 1876, VI, 170-75, 180-81). There is frequent reference to questions of population in the unprinted *Pensées et fragments de Montesquieu*, published by Baron Gaston de Montesquieu (Bordeaux, 1899).

³ France could support fifty million "without trouble," but it contained only fourteen million (*Pensées*, I, 180), six million less than formerly (see n. 4).

⁴ See *Persian Letters*, in *Persian and Chinese Letters*, ed. John Davidson (London, 1901), pp. 206-10; *The Spirit of Laws* (Glasgow, 1793), II, 123. In *Laws* Montesquieu states that population grew in the small countries which later composed the Roman Empire, only to diminish when Rome swallowed them up. Later, when Rome was replaced by many small countries, lacking in riches and men, numbers grew, only to diminish when the little states were again recombined. "It is the perpetual re-union of many little states that has produced this diminution" in population; it is the replacement of many local centers of power by Paris. In proof of the "fact" that "most countries were better peopled" formerly, he cited the "prodigious" armies of the Crusades and Puffendorf's statement that France under Charles IX contained twenty million (*Laws*, II, 107-09, 123-24; also *Pensées*, I, 183).

wrote in 1748.⁵ In 1721 he had declared that all parts of the world had undergone depopulation.

I have reviewed the whole world, and found nothing but decay: I think I see the earth emerging from the ravages of pestilence and famine. . . . There are upon the earth hardly one-tenth part of the people which there were in ancient times. And the astonishing thing is, that the depopulation goes on daily: if it continues, in ten centuries the earth will be a desert. Here . . . you have the most terrible calamity; . . . it . . . denotes an inward defect, a secret and hidden poison, a malady of decline, afflicting human nature.⁶

Among the checks to population growth, which in his opinion were more operative in many countries than formerly,⁷ and which were responsible for depopulation in parts of the world, Montesquieu included: (1) polygamy, particularly as practiced by Mohammedans;⁸ (2) the spread of Christianity, with its stress upon asceticism in marriage, and its prohibition of divorce;⁹ (3) celi-

⁵ *Laws*, Bk. XXIII, chap. xxiv.

⁶ *Letters*, Letter 113.

⁷ In *Pensées* it is said that among the ancients, especially the Romans, veneration for ancestors caused celibacy and sterility to be frowned upon (II, 399-400); that the availability of land and desire for familial security facilitated Hebrew natural increase (I, 176, 178-79). Continued peace, coupled with an abundance of rice and fish, fostered population growth in Japan, which, along with China, was not subject to depopulation (II, 402). In China ancestor worship, peace, the absence of eunuchs, the abundance of rice, the favorableness of the climate for human generation and agriculture, and the tenets of China's religions (other than the sect of Foë) were conducive to population growth (I, 178; II, 216). He noted, however, that child exposure checked population growth in China, and cannibalism checked it in Tartary (*ibid.*, I, 153, 178).

⁸ Where polygamy is practiced there are many female slaves and eunuchs (attending harems) who do not reproduce. Moreover, the man with many wives becomes physically debilitated, suffers a diminution in natural fecundity, and often produces offspring who are weak and of low natural fecundity (*Letters*, p. 210). In *Laws* (I, 304-06) he remarked that the ratio of male to female births nowhere justifies either polygamy or polyandry; that polygamy promotes lust; that one parent cannot love as many children as many wives could procreate.

⁹ Divorce, said Montesquieu, not only permits the mending of "badly assorted" or infertile unions; it also creates a state of mind conducive to fertility, for married persons, knowing they can obtain a divorce, adjust to each other, become compatible, and inclined to sex life and reproduction. Coldness, which is not favorable to fertility, often develops in couples who know they cannot obtain a divorce. Therefore, the Roman religion, which permitted divorce, was more favorable to fecundity than Christianity (*Letters*, pp. 213-15). He added, too, that Jews procreated because they believed one of them would become king of the world; that Persians procreated because religious decrees required it; that Chinese ancestor worship stimulated procreation; that Mohammedans, relying wholly upon providence and thinking not of the future, were less inclined to procreate (*Letters*, pp. 218-19; *Laws*, II, 120). In *Les Mœurs* (1748 ed., pp. 350 ff.), Toussaint reasoned that he who was fertile had a right and duty to procreate.

bacy;¹⁰ (4) modern slavery;¹¹ (5) efforts to develop colonies.¹²

In the *Laws* Montesquieu went beyond the mere discussion of the checks enumerated, and developed the economicocultural theory of population growth implicit in his *Letters*. He indicated that the relative number of marriages was governed largely by the availability of subsistence.

Wherever a place is found in which two persons can live commodiously, there they enter into marriage. Nature has a sufficient propensity to it, when unrestrained by the difficulty of subsistence.

A rising people increase and multiply extremely. This is, because with them it would be a great inconvenience to live in celibacy; and none to have many children. The contrary of which is the case when a nation is formed.¹³

But he did not consider the availability of subsistence to be the sole determinant either of frequency of marriage or of fertility; for he said that only those who "have absolutely nothing," who will suffer a decline neither in their own economic status nor in that of their children (e.g., beggars, poor peasants), will have children without restriction.¹⁴ If men are not well off, and fear

¹⁰ In *Letters* (pp. 215-17) he noted that celibacy prevents more births than war and death; that Protestant countries, without celibacy, would outstrip Catholic countries in population growth, and consequently in revenue, agriculture, and trade. In *Laws* (II, 121) he observed that in Rome the spread of nonreligious celibacy had been accompanied by an increase of corruptness among the celibates, but added that "God forbid that I should speak against celibacy as adopted by religion."

¹¹ Roman slaves were allowed to reproduce, said Montesquieu, whereas Moham-
medan slaves were not (*Letters*, pp. 212-13). In his day slavery was depopulating
Africa; yet, because of the nature of their work and the fact that they were not adapted
to the climate, the slaves who were carried from Africa to the Western Hemisphere
were not replacing themselves (*ibid.*, pp. 217-18, 221).

¹² Montesquieu's colonial views were based upon his climatic theory, which he derived in part from Chardin's *Journal* (1711). Since the people of European mother countries could not multiply in colonies because colonial climates were unsuited to them, colonies tended to sap mother countries (*Letters*, pp. 221-22). In *Laws* (I, Bks. XIV-XVII; II, 106, 116), he observed that climate conditioned the length of the childbearing period and the rate of population growth; that laws must be adapted to climate. Bodin had made of climate as important a determinant of history and culture as race (J. Barzun, *The French Race*, pp. 72-73). The French historian and critic, the Abbé Dubos (1670-1742), in *Réflexions critiques sur la poésie et sur la peinture* (Paris, 1719), had said that climate influenced artistic expression and socioeconomic conditions in a very marked manner (A. H. Koller, *The Abbé Du Bos—His Advocacy of the Theory of Climate*, Champaign, Ill., 1937).

¹³ *Laws*, II, 101.

¹⁴ *Ibid.*, II, 102; *Letters*, p. 224. "Mankind multiplies in a country which affords abundance for the children, without diminishing in the least the parents' provision"

that their children will be worse off, they will not marry, or if they do, they will limit the number of their children to prevent a decline in economic status.¹⁵ In so far as population is governed by subsistence,¹⁶ it will be greater if trade and commerce prevail along with agriculture,¹⁷ if the modes of agriculture require and support many workers,¹⁸ if lands are equally divided,¹⁹ and if the resources of the country are not wasted.²⁰ That pop-

(*Letters*, p. 224). In an expanding nation (i.e., presumably a new and rising nation) men married and had many children because it was advantageous to do so.

¹⁵ *Ibid.*, p. 224.

¹⁶ He attributed the allegedly higher natality of seaport towns to the higher ratio of men to women in ports, to the ease with which subsistence could be procured there, and to the importance of fish in the diet (*Laws*, II, 103). He pointed to the great fecundity of China and Japan as evidence of the fecundity-favoring qualities of fish. "Perhaps even the oily parts of fish are more proper to furnish that matter which contributes to generation. . . . [If so,] certain monastic rules which oblige monks to live on fish, must be contrary to the spirit of the legislator himself" (*ibid.*, pp. 103-04). Even today fish, "conch" soup, etc., are considered sexual stimulants.

¹⁷ *Letters*, p. 199. In *Laws* (II, 124), however, he observed that trade involved navigation, which, though it attracted people to a country such as Holland, on the balance depopled Europe; for it carried Europeans to other lands, but brought none back, inasmuch as Europe was surrounded by seas, deserts, and Mahometans. Cf. *Pensées*, I, 181, 183; II, 402.

¹⁸ He lists in order of the number of persons required to work, and supportable by, a given amount of land: grazing (few), corn, vineyards, rice (very many) (*Laws*, II, 104; I, 331; also *Pensées*, I, 476; II, 402).

¹⁹ When, as in France, land was unequally divided, many did not have enough land for self-support. He therefore advocated distribution of land to the needy, provided that they would work it industriously (*Laws*, II, 126). (Elsewhere [*Letters*, pp. 219-20] he indicates that among savages dislike for hard work and recourse to abortion check population.) He believed primogeniture, which he attributed to vanity, to be a cause both of inequality in property-holdings and of lack of attention to younger children (*Letters*, p. 219). When land is not equally divided, some have more landed products than they can consume, others have little or none. If the latter class is to obtain support, the arts must be advanced enough to permit them to make superfluities which can be exchanged for the excess food of the landowners (*Laws*, II, 105). He contended, however, that luxuries, although necessary in monarchies and despotisms, are destructive to republics; and that, consequently, in order that luxury may be kept out of republics, landed property must be kept fairly equally divided, and dowries be made small and fairly equal (*Laws*, I, 55, 113-31). He defined as luxury anything in excess of "support of nature" (*ibid.*, I, 113). In his earlier *Letters*, written at a time when he probably had not been influenced by Mandeville, he declared (p. 199) that superfluities are as important as necessities in so far as the power of the prince is concerned.

²⁰ Man will have few children when governments tax away almost everything but subsistence. Such is the effect of the increased taxes required to support growing standing armies (*Laws*, I, 263; II, 3, 102). The growth of such armies, Montesquieu predicted, would destroy the national wealth and beggar the country (*ibid.*, Bk. XIII, chap. xvii). Montesquieu was not as critical of the French tax system as were most of his contemporaries (*Laws*, Bk. XIII, on taxation).

ulation growth is not dependent solely upon subsistence and the way it is produced and divided, but also upon cultural factors which shape the standard of living, is evident in Montesquieu's recognition of the many obstructions to propagation;²¹ in his observation that propagation is favored in, and immigrants are attracted to, countries where government is mild and liberty and equality prevail;²² in his comment that crimes "against nature" are not known and committed when customs are good;²³ and in his implication that urbanization may be unfavorable to propagation.²⁴

Despite his recognition of the slow-working effect of legislation, Montesquieu favored the enactment of pro-populationist measures, with the qualification, however, that the propagation on part of those whose children would be condemned to misery should not be encouraged. He considered great depopulation almost irreparable, requiring at best centuries in which to be corrected.²⁵ Losses caused by war, pestilence, and famine he believed to be easily reparable, other things equal. Depopulation was not easily correctible, however, when it was the result of "interior vice and bad government" which robbed men of courage and industry, and caused them to doubt their ability to produce enough to nourish a family. France and Europe were suffering from this latter type of depopulation, Montesquieu seems to have believed. "Europe is at present in a condition to require laws to be made in favour of the propagation of the human species. . . . The politics of this age call upon to us take

²¹ "The females of brutes have an almost constant fecundity. But, in the human species, the manner of thinking, the character, the passions, the humour, the caprice, the idea of preserving beauty, the pain of childbearing, and the fatigue of a too numerous family, obstruct propagation a thousand different ways" (*Laws*, II, 95). Cf. *Pensées*, II, 401-02. He also lists prostitution and illicit unions as checks to propagation (*Laws*, II, 96). In *Pensées* (II, 401) he commented that only married persons people; that there are as many male lay and religious celibates as there are prostitutes and female religious.

²² *Letters*, 224; *Laws*, II, 102.

²³ *Laws*, I, 226-27. He condemned the French law (that of Henry II, 1556) against abortion as too severe (*Letters*, 220).

²⁴ He states that in cities where people do not know each other, they are under greater compulsion to distinguish themselves by luxurious consumption. Each "assumes the mark of a superior condition," and his wants tend to exceed his real needs. His argument resembles Veblen's, and was apparently influenced by Mandeville (*Laws*, I, 113-14), whom he cites (*ibid.*, Bk. VII, chap. i).

²⁵ *Letters*, p. 221.

proper means to increase ours."²⁶ The French laws of Colbert were of no use, as they rewarded only the prodigiously fruitful.²⁷ Montesquieu favored instead general rewards and penalties, such as the ancient Roman laws provided, but he noted that such laws were efficacious only so long as depopulation was the result of war losses, and not of corrupt, despotic, and anarchic government.²⁸ He added, too, that laws, to be effective, must "communicate a general spirit which leads to the propagation of the species."²⁹ He implied, further, that if land were distributed to families in want, and if subsistence were assured to all, propagation would be encouraged;³⁰ and that, were subsistence not assured, many who were born would die young and the race would decline and degenerate.³¹

Although Montesquieu favored pro-populationist legislation,

²⁶ *Laws*, II, 124, 125. In *Letters* (pp. 208-10) he stated that evils such as syphilis were subject to control. In *Pensées* (I, 183; II, 401) it is noted that commerce and communication facilitate the spread of maladies, and it is urged as a means of preventing the spread of venereal disease that all persons coming from the Indies be quarantined.

²⁷ *Laws*, II, 125.

²⁸ *Ibid.*, pp. 121-23, 125. In *Pensées* (I, 183) he attributed the depopulation of Spain and Germany in part to "le soldat perpétuel."

²⁹ *Laws*, II, 125. In his unpublished notes he outlined in detail a populationist program which, however, he did not incorporate in *Laws*. Since concubinage and celibacy, lay and ecclesiastical, were unfavorable to propagation, it was essential that the population be encouraged to marry and that monasticism be restricted. Inasmuch as only men could enjoy the pleasures of the married state outside marriage, men rather than women needed to be induced to marry. He proposed, as means to stimulate marriage, that the age at which children could marry without the consent of their parents be reduced to twenty years for females and twenty-five for males; that unmarried males of twenty-five or more years be deprived of the right to inherit or bequeath property; that unmarried males be declared ineligible to serve in judicial capacity or as witnesses; that the unmarried be made to pay a trebled capitation tax; that the employment of unmarried domestics over twenty-five years be prohibited; that the annulment of marriage on the ground of disparity in the conditions of the two parties not be permitted; that all girls, not prostitutes, be compelled to live under the surveillance of their elders; that prostitution be punished and prostitutes placed in work-houses until claimed for the purpose of marriage; that celibates be required to support the twelfth child of each large family. As means of stimulating procreation by the married Montesquieu proposed that the number of children of an individual be a determinant of his rank and position in public assemblies, meetings, etc.; that those with seven children, living or killed in war, be exempt from all taxes, and that those with six children be exempt from half their taxes; that those with five children enjoy ordinary privileges, such as exemption from *tutelle* and the lodging of soldiers; that the individual, in each community, who has the most children enjoy the honors and privileges of members of the magistrature; and that the heir with the most children enjoy a preference in respect to the legacy (*Pensées*, I, 182; II, 351, 395-96, 400, 441).

³⁰ *Laws*, II, 126-27.

³¹ *Letters*, pp. 224-25.

he did not desire unlimited population growth, in part because a useless excess of population would result,³² and in part, perhaps, because such growth would unduly prejudice human welfare.³³ He opposed certain types of charity, not because they favored population growth, but because they conduced to indolence, even as did poverty.³⁴ He did not indicate how many people Europe could support; but judging from his belief that France could support fifty million,³⁵ he supposed that Europe could support a very large population.

Montesquieu's opinions are reflected in the works of many later writers, particularly in those of certain contributors to the *Encyclopédie*. D'Alembert (1717-1783), a mathematician and believer in progress, who was content to repeat Montesquieu on population, said that public morality favored population growth; that laws, such as the "fine" laws of Augustus, would favor population growth so long as the people remained patriotic; that hospitals could foster population growth if they avoided encouraging beggary and sloth.³⁶ "Population and the number of inhab-

³² "Of what use to a state are those crowds of children which waste away in misery?" They are feeble and will be carried off by epidemics to which poverty and bad diet give rise; if they survive to manhood, they will lack vigor. As evidence, he refers to the fact that during the late wars, when youths married to escape militia service, the children born to such unions were destroyed by poverty, famine, and disease (*Letters*, pp. 224-25).

³³ In *Letters* (pp. 208-10) he merely observed that the fertility of some but not all parts of the world was exhausted. In his unpublished notes on *Laws* (*Pensées*, I, 180-81) he emphasized the productive capacity of the earth. "The earth always yields in proportion to the demand made on it," he wrote, pointing to the productivity of agricultural land near cities. The sea contained a great supply of fish. The discoveries of the philosophers and voyageurs would not be needed until the earth was more densely peopled. In *Laws*, however, he did not develop this thesis. He did not discuss technological progress except to say that if labor-saving devices further cheapened goods already cheap, the displaced workers would not be able to find employment (*Laws*, II, 105).

³⁴ "The state . . . owes to every citizen a certain subsistence, a proper nourishment, convenient clothing, and a kind of life not incompatible with health. . . . [When] mechanics [are] in a momentary necessity, . . . the state is obliged to lend them a ready assistance; whether it be to prevent the sufferings of the people, or to avoid a rebellion. . . . But it is plain, that transient assistances are much better than perpetual foundations." Permanent succor fostered idleness, Montesquieu believed (*Laws*, Bk. XXIII, chap. xxix, esp. pp. 127-28). In *Pensées* (II, 404) he noted that because of the greater number of holidays celebrated in Catholic than in Protestant countries, the populations of the former were one seventh less productive.

³⁵ *Pensées*, I, 180.

³⁶ "Éloge de Montesquieu," *Œuvres complètes* (Paris, 1821), III, 474. Like Tous-saint (*Les mœurs*, p. 519), D'Alembert believed that no one had a right to super-

itants have with commerce an immediate relation, and marriages have as their object population. . . . *Liberty, security, moderation in taxes, proscription of luxury, are the true principles and the true supports of the population.*"³⁷

D'Amilaville, in the article on "Population" in the *Encyclopédie*,³⁸ reflected Montesquieu's views; he also cited Wallace in support of the belief³⁹ that those countries, which in ancient times had been better "policed," were now less populous. D'Amilaville denied that population increases geometrically, and implied that in the long run numbers are fairly constant.⁴⁰ Most of the article was devoted to an enumeration of checks to population (nearly all of which had been mentioned by other writers); but no real effort was made to show whether checks were more operative than formerly,⁴¹ nor was it more than implied that numbers are governed by the standard of living and the available supply of disposable resources, as many writers then held.

Among the checks to population growth D'Amilaville men-

fluities until the indispensable needs of everyone had been satisfied. When a part of the population lacked this indispensable minimum each person enjoying more than the minimum was obligated to contribute to the making up of this deficit in proportion to the degree that his income exceeded the minimum (*Œuvres*, I, 214-15; also V, 292-93).

³⁷ "Éloge," *Œuvres*, III, 473, 474. His italics.

³⁸ *Encyclopédie* (Neufchâtel, 1765), XIII, 88-103. The author cites Wallace (see below) frequently, also Voltaire, Montesquieu, Quesnay, Templeman, Vossius, Vauban, Hubner, Hume, and Roman writers. D'Amilaville considered Wallace's estimate of six children per marriage to be too low, rather than too high (*ibid.*, p. 88). In the anonymous article, "Enfants," Derham's estimate of about four children per marriage is taken as representative (*ibid.*, VI, 656). In "Population," *Supplement*, IV (1777), 504-06, by M. de la Lande, Expilly's estimate of twenty-two million for France is accepted, as are Bielfeld's (see Chapter III, above) estimates. De la Lande refers to the works of Süssmilch, Messance, Kerseboom, Halley, Deslandes, Petty, Graunt, Deparcieux, Buffon, Maitland, Simpson.

³⁹ According to Puvilland (*op. cit.*, p. 100), D'Amilaville based his opinion that population had not increased upon the calculations of Abbé J. B. Dubos, *Histoire critique de l'établissement de la monarchie française dans les Gaules* (1735).

⁴⁰ He cites the author of *Essai sur le mérite & la vertu* to the effect that there is a natural balance among all forms of animal and vegetable life. D'Amilaville suggested, apparently as evidence, that following great losses (e.g., from war) the "sentiment of affection" is strengthened temporarily until the losses are made good through natural increase (*op. cit.*, XIII, 91). Cf. Buffon; also Diderot, author of *Essai sur le mérite*.

⁴¹ D'Amilaville did observe that inoculation against smallpox would eliminate one of the "principal causes of depopulation." Voltaire anticipated a great diminution in mortality, in consequence of inoculation, and DuVillard estimated that the average length of life would be increased three and one-half years (Schöne, *op. cit.*, p. 212).

tioned polygamy among the Mohammedans; Christian opposition to divorce; ecclesiastical celibacy; religious intolerance; the fact that a person falling in love with a person of another religious faith could not marry that person; the belief in immortality and otherworldly paradise, which caused men not to care to people this world or to conserve the race; slavery; growth of large states; despotism; misery; debauchery; primogeniture; mortmain; colonies; war; conquest; payment of tribute; heavy taxes; luxury, and the keeping of domestics and retainers; urbanization; founding homes; the uncertainties attendant upon employment in manufacturing; inequality; lack of liberty; corrupt customs; pestilence; famine; disease; perilous occupations; earthquakes; tidal waves; bad government. Conversely, he believed that population growth was favored where agriculture was the dominant industry; where wealth was fairly evenly divided, adequate for health, secure, and sufficient to enable a potential parent to hope that he could provide for his offspring; where government was stable, just, tolerant, and solicitous of personal liberty; where provisions were easily obtained.⁴²

Chevalier de Jacourt (1704-1779), a scientist like Buffon, also was influenced by Montesquieu. De Jacourt, who described agriculture, commerce, and population as the "sources of the wealth of subjects and sovereign,"⁴³ regarded ecclesiastical celibacy as the chief cause "of the dearth of people" in Catholic countries.⁴⁴ However, among the ultimate causes of preventive control of numbers, he included, as had Montesquieu, the passions, luxury, love of pleasure, desire to conserve beauty, embarrassment occasioned by pregnancy, the much greater embarrassment of a large family, the difficulty of educating children, etc. All checked population growth and caused "to be invented a thousand means to prevent conception. The example spreads from the nobility to

⁴² D'Amilaville was more critical of luxury than most of those who wrote for the *Encyclopédie*. Luxury, he wrote, was not necessary to provide employment or to encourage the arts; by squandering resources it caused unemployment and beggary; in general, it checked population growth. He also criticized commerce and manufacturing in so far as they promoted luxury or caused urbanward migration (*ibid.*, pp. 94, 100-02).

⁴³ "Impot," *Encyclopédie*, VIII, 604. See also *ibid.*, VII, 282, where he criticizes the existing tax system, and describes tolerance as favorable to population growth. Montesquieu had implied that tolerance is favorable to population growth.

⁴⁴ "Monastere," *ibid.*, X, 638.

the bourgeoisie, to the people, to artisans, to laborers who fear in certain countries to perpetuate their misery."⁴⁵

Checks to population growth were discussed in several other *Encyclopédie* articles. One writer stated that since the inconveniences attending marriage and the support of a family constituted the chief check to multiplication, wise governments needed to encourage, as had the Romans, "by all possible means those who have a great number of children."⁴⁶ M. Beguillet attributed the populousness of the Gauls to their deriving support from agriculture rather than from commerce.⁴⁷ Another wrote that population growth is governed by the ease and certainty of obtaining subsistence, increasing and decreasing therewith.⁴⁸

Diderot's opinions on population, scattered through the *Encyclopédie*, reflect Montesquieu's influence in but a minor degree; for Diderot did not share Montesquieu's conservatism and dislike for measures intended to accelerate greatly the rate of political change.⁴⁹

Diderot stated several times that since the wealth and military power of a state depend upon the number of its citizens, a sovereign "will occupy himself seriously with the multiplication of his subjects."⁵⁰ Yet, as a disciple of the physiocrats, he treated land as virtually the sole source of net income, said that manufactures produce little above the remuneration of the workers,⁵¹ and observed that the yield of the soil is always proportional to the "advances" of the husbandman.⁵² Despite his

⁴⁵ "Fausse-Couche," *ibid.*, VI, 453. He referred to the dangers attending abortion and to the fact that their number "is extremely considerable." He advocated foundling homes as a check to abortion; he stated that the severe anti-abortion edict first put into effect by Henry II was not a deterrent (*ibid.*, pp. 452-53). Elsewhere (VII, 282) he described Colbert's pro-populationist measures as useless.

⁴⁶ "Politique arithmétique," *ibid.*, XII, 921.

⁴⁷ "Agriculture," *Supplement*, I, 214.

⁴⁸ "Abondance," *Supplement*, I, 31. No reference is made to America's rate of population growth in the article, "Amérique" (*ibid.*, I, 346), signed by Engel. In an unsigned article (*ibid.*, IV, 781) it is said the population of Siberia grows rapidly, in one place 75 per cent in thirty years.

⁴⁹ Sée, *L'évolution*, pp. 176-97.

⁵⁰ "Homme," *Œuvres* (Paris, 1876), XV, 138; "Celibat," *ibid.*, XIV, 51. The second article is an attack upon ecclesiastical celibacy, based in part on Morin (see Chapter III, n. 127). Man is duty-bound to conserve the species (*Œuvres*, I, 108; XIV, 50).

⁵¹ "Laboureur," *Œuvres*, XV, 408; "Homme" (*ibid.*, XV, 139). He also defended liberty in cultivation and trade, saying that it made wages higher (*ibid.*, XV, 408-09). Elsewhere ("Privelege," XVI, 419) he stated that competition exercised a depressive effect upon wages.

⁵² *Œuvres*, XV, 407-09.

acceptance of certain physiocratic tenets, Diderot did not discuss the relationship between population growth on the one hand and income and happiness on the other; presumably, he believed that men would be happier if social arrangements and the mode of living were simplified, a democratic state were established, and government were made the servant of the people.⁵³ He was critical of the employment of workers as domestics and in the luxury industries, presumably because luxury is the product of unsanctionable economic inequality.⁵⁴ He discussed two specific checks to population, celibacy⁵⁵ and child mortality, each of which he wanted reduced,⁵⁶ but he neglected the broader problem of population pressure.⁵⁷

The author of "Depopulation," in the *Encyclopédie méthodique*,⁵⁸ followed Montesquieu somewhat. The causes of depop-

⁵³ Diderot favored not a return to primitive life and social organization, but a return to a state intermediate between savagery and civilization (Bury, *op. cit.*, p. 184). Diderot stated (*Œuvres*, II, 411), in a criticism of Helvétius, that population grows more rapidly in civilization than in savagery. He also remarked (*ibid.*, II, 225-28) that the Tahitians favored large families because they were a source of wealth.

⁵⁴ *Œuvres*, II, 415; XV, 139. He defines the "wealth of a nation" as the "product of the sum of its labor beyond the costs of wages" and says that the larger and more evenly divided this "produit net," the better will be the administration (*ibid.*, XV, 139). He takes no stand on the question as to whether or not a small farm system leads to greater total production than a large farm system (*ibid.*, XVII, 460). He is not opposed to luxury in moderation (*ibid.*, XVI, 5-30).

⁵⁵ Celibacy, whether ecclesiastical or otherwise, caused immorality, Diderot said, citing Montesquieu (*ibid.*, XIV, 51). Were priests to marry, France would experience ten thousand more births a year (*ibid.*, XIV, 55).

⁵⁶ He estimated that five thousand children were annually exposed in Paris (*ibid.*, XV, 139). He condemned mercenary wet nursing, saying that the milk of the mother was more suited to the child, that nurses spread venereal disease, and that it was better to raise the child on the milk of animals than to place the child with a mercenary nurse (*ibid.*, XV, 127; XVI, 150). The author of "Enfants," *Encyclopédie* (VI, 660), declared that the milk of nurses was injured by too frequent coition.

⁵⁷ Curiously enough, despite his failure to develop a conception of the pressure of life upon subsistence, he did develop a theory of organic evolution (see his *Lettre sur les aveugles*, 1749), saying that, of the many combinations of matter to which chance had given rise, there survived only those better adapted and capable of supporting themselves and perpetuating their species. On eighteenth-century theories of evolution see A. O. Lovejoy, *The Great Chain of Being* (Cambridge, 1936), chap. ix.

⁵⁸ Vol. LXIII (*Economie politique et diplomatique*, II), (Paris, 1786), pp. 69-71. Population was treated in several other articles. In "Population" ([*Finance*, III], LXXIX [1787], 343-45) it was said that state revenues from taxes on commodities increased as population increased; that the French population, which had not grown under Louis XIV, had increased in the eighteenth century; and that this increase was due to the progress in knowledge and the spread of the philosophical spirit which had caused an improvement in government. Population pressure was not listed as a cause of mendicancy ("Mendiant" [*Jurisprudence*, VI], CXLII, 1786, 3-7), but it was said

ulation were physical and moral in character. Depopulation ascribed to physical causes, among which he placed climatic changes, disease, war, etc., was reparable. Depopulation traceable to moral causes was often difficult to correct. Among the moral causes of depopulation the author included polygamy and ecclesiastical celibacy; the destructiveness of the penal laws; the growth of luxury; the largeness and extent of modern states; the use of mercenary wet nurses; the "immense number" of idlers and mendicants; bad administration of hospitals and workhouses; *corvées* and burdensome taxes; religious wars and persecutions; the "detestable princes" and the "brigands" who wanted to be conquerors; the multiplicity of soldiers who did not marry, debauched women, and spread disease; the law of primogeniture, which concentrated the bulk of parental property in the hands of the eldest son; distant commerce between Europe and Asia; the corruption of the *mœurs* by the "spirit of libertinage" and "bad education"; and the importance attached to large dowries which diminished the number of marriages and caused sterility in those contracted. He added, too, that the ancients, unlike the moderns, had a taste for a "calm and rural" existence; that the flocking of domestics to the cities depeopled the countryside and increased the number of celibates; and that whereas the ancient masters of the slaves and the poor had encouraged them to marry, no one in the modern state would relieve the misery of the indigent and enable them to marry. The author seems to have considered the concentration of property in the hands of a rich minority and the resultant deprivation of the masses of employment and income to be the primary causes of depopulation. Therefore, he described the redistribution of land to all who had need of it to earn a living as the only effective means of arresting continuous depopulation.

that dearth was more to be feared when "population is considerable" (CXXXVII, 1782, 28). Agriculture was several times described as the mode of life and branch of the economy particularly favorable to the growth and health of the population (CXXXVII, 26-27, 236; also I, 1787, 15-16). A eugenic note was sounded several times. It was urged that prostitution be suppressed, so that the spread of venereal disease would be checked (CXLIII, 1787, 53); and that such diseases as epilepsy be declared grounds for divorce, in order that the spread of hereditary disease might be checked (CLXVI, 1792, 32-34). See also Peuchet, Chapter IV, above.

Voltaire differed from Montesquieu in many respects. Voltaire had little more respect for the intelligence of the common man, yet defended with far more vigor civil liberty and tolerance. Voltaire rejected Montesquieu's climatic and geographical explanations of human institutions because, far more than Montesquieu, he believed that man's condition varies greatly because his *mœurs* vary greatly, corresponding at times with what reason prescribes, and at times with what is contrary to reason. In the field of demography Voltaire differed sharply from Montesquieu in respect to the past population of the earth.

In his *Essai sur les mœurs* Voltaire (1694-1778) dealt chiefly with checks to population growth, saying that nations often experienced diminutions in number and were fortunate if they increased 5 per cent per century. Among the important general checks, he mentioned child mortality and war;⁵⁹ among the checks operative in the New World, cold weather, floods, poison plants, bad food, and human stupidity.⁶⁰ In his "Population" (1771) he noted various checks: war, famine, pestilence, persecution, and religious celibacy.⁶¹ Elsewhere he mentioned war, the existing "hospital" system, infertility of the soil, and high urban living costs, as factors unfavorable to population growth.⁶²

⁵⁹ *Œuvres de Voltaire*, ed. M. Beuchet (Paris, 1829), XV, 261; XVIII, 488. Melon was criticized by Voltaire for understating the destructive effects of war on population (*ibid.*, XXXVII, 532-34). Voltaire proposed (*ibid.*, XLIII, 432-34) that soldiers be enabled to marry inasmuch as they then could propagate and would be better soldiers, less likely to desert, and disposed to cultivate the soil.

⁶⁰ *Ibid.*, XVII, 408-09. He condemned, as had Toussaint and others, the barbarous *droit d'aubaine* whereunder foreign children, resident in France, might suffer the loss of the parental property, but did not emphasize it as a check to population growth (*ibid.*, XVIII, 484-85).

⁶¹ *Dictionnaire philosophique*, *Œuvres*, XXXI, 471-72, 480-82. Protestant countries (England, Germany, Holland) were relatively better peopled than France, for they were free of useless monks and celibate clergy. Moreover, the Protestant clergy procreated robust children and educated them (*ibid.*, XXXI, 481-82). Voltaire advocated the suppression of the taking of monastic vows by children and the accompanying alienation of their property at an age when the ordinary disposal of fortune was forbidden.

⁶² *Œuvres*, XXVIII, 17, 336, 518. Voltaire's attack on the Church and ecclesiastical celibacy was condemned by the Abbé Nonotte, who defended the revocation of the Edict of Nantes and criticized Voltaire for insinuating that "there are different species of men." Nonotte attributed the slowness of French population growth to libertinage and bad *mœurs* rather than to sacerdotal celibacy. He charged that there were over two million marriageable lay celibates in France; that in Paris alone there were enough to people a part of "our deserted colonies"; and that many married couples limited the number of their children to one or two (*Les erreurs de Voltaire*, 4th ed., Lyon, 1770, I, 453-60; II, 13-16, 113, 163, 166-68).

Voltaire's various comments, together with his discussion of depopulation, suggest that he believed population growth to be conditioned primarily by the accessibility of food. Seminal material, of which man generally had a superabundance, made him procreate, for the alternatives to copulation were sickness, sin, or sadness.⁶³ When there are provisions, animals mate, and humans marry.⁶⁴ He considered it a "general law that population is ordinarily in proportion to the bounty of the soil."⁶⁵ In his calculations based upon the notion that man propagates in geometrical progression—"absurd chimeras," said Voltaire—he pointed out that if either men or monkeys multiplied in this fashion, the earth would be unable to nourish them within two centuries.⁶⁶

Much of the article, "Population," was directed against Wallace, Montesquieu, Mirabeau, and D'Amilaville, who had contended that numbers were less in their day than formerly. It was absurd to say, as had Montesquieu, that in Caesar's time the world was thirty times more peopled; or that France contained twenty million under Charles IX;⁶⁷ or, as had Mirabeau, that Spain, in Caesar's day, numbered fifty-two million. Wallace exaggerated even more than Montesquieu, if that were possible, for he assigned ancient Judea more population than it could support.⁶⁸ Voltaire observed that Germany, England, and France were more peopled in his day than formerly, and that Europe's numbers had trebled since Charlemagne's time. He offered as proof the "prodigious extirpation of forests," the multiplication of great cities, and the marked progress in the arts and sciences.⁶⁹ Referring specifically to D'Amilaville's charge that France had undergone depopulation, Voltaire replied that war does not depopulate in the long run, inasmuch as the females are not destroyed, and that the losses caused by the "cruel" persecution of the Protestants had been repaired. The annual revenues of the

⁶³ "Population," *Œuvres*, XXXI, 472.

⁶⁴ *Ibid.*, XXXI, 478; see also *Œuvres*, XXXI, 127, on "mariage."

⁶⁵ "Population," *Œuvres*, XXXI, 482.

⁶⁶ *Ibid.*, XXXI, 482.

⁶⁷ *Œuvres*, XXXI, 473-74, also p. 102. Voltaire also criticized Montesquieu for saying that in ancient times men were more prolific because they were healthier (*ibid.*, XXXI, 474).

⁶⁸ *Ibid.*, XXXI, 475-76.

⁶⁹ *Ibid.*, XXXI, 476, 482. Only Rome had suffered depopulation, according to Voltaire.

crown had not decreased, the reports of the intendants revealed population growth, and the food supply was greater than formerly.⁷⁰

Although Voltaire believed that "the wealth of a State consists in the number of their inhabitants and their labor,"⁷¹ he rejected the doctrines and objectives of the populationists. When the population of a country became very dense, it either grew very slowly,⁷² as in overpopulated China,⁷³ or suffered emigration to foreign parts.⁷⁴ Moreover, what mattered was the happiness of the people, not mere number. "The principal point is not to have a superfluity of men, but to render those of them that we have as little unhappy as possible."⁷⁵ Presumably he considered France to be sufficiently peopled, for he remarked that there were more postulants than places in France, and that the country was overrun with idle beggars and monks.⁷⁶ He apparently believed the Occident and the New World to be underpeopled, however.⁷⁷ That he did not expect the human lot to grow worse, in consequence of population pressure or other evils, is inferable from his expression of faith in industrial and scientific progress, and in man's ability to dissolve the prejudices which, in the past, had multiplied misery.⁷⁸

Although Voltaire dealt at length with questions concerning luxury, he did not specifically relate it to the population problem. He defined luxury as the satisfaction of wants that, at the time, are superfluous even though later they may become necessities. These wants had their origin, in a society founded upon private property, in the fact that economic activity was directed to the provision of well-being, and that human ingenuity was constantly developing new goods. Luxurious consumption, when not excessive, was to be defended, for it increased human well-being, activated man, and fostered public prosperity. In general, then,

⁷⁰ *Ibid.*, XXXI, 479-82. But see n. 59, above.

⁷¹ *Œuvres*, XXXIX, 391.

⁷² *Essai sur les mœurs*, in *Œuvres*, XV, 201.

⁷³ *Ibid.*, XVII, 478.

⁷⁴ "Population," *Œuvres*, XXXI, 483.

⁷⁵ *Ibid.*, XXXI, 483.

⁷⁶ *Ibid.*, XXXI, 478.

⁷⁷ *Essai . . .*, *Œuvres*, XVII, 408, 478. He gave population estimates for many countries and the world. E.g., see *Œuvres*, XV, 262; XXVIII, 339; XXXI, 102, 473-74.

⁷⁸ Martin, *op. cit.*, p. 143; also J. B. Black, on Voltaire, in Hearnshaw, *op. cit.*, pp. 136-67, and H. Sée, *L'évolution*, pp. 104-33.

he looked upon luxury as favorable rather than unfavorable to the public weal and population growth.⁷⁹

The Abbé Raynal's (1713-96) celebrated work probably contributed as much as Voltaire's writings to dissipate the notion that the world was less peopled than in ancient times.⁸⁰ Accepting Franklin's dictum that population multiplies where subsistence is easily obtained and men are happy,⁸¹ Raynal thought it highly probable that both the world and Europe were more peopled than formerly, inasmuch as the arts had advanced, land was more efficiently cultivated, and warfare had declined because of the reduction in the number of states.⁸² He attributed the belief that population had diminished to the fact that population pressure had led to emigration and a consequent diminution in number in some places, and to the fact that, with the decline of feudalism, urban growth had produced rural depopulation in some places.⁸³

The advent of modern times, though favorable to population growth in some respects, had brought into more effective play certain new checks.⁸⁴ The prevailing distribution and mode of

⁷⁹ On Voltaire's views on luxury see M. Gaffiot, *R. H. S.*, XIV (1926), 320-43; A. Morize, *L'apologie du luxe au XVIII^e siècle* (Paris, 1909), pp. 29-30, 60-63, 67, 69, 71-80, 111-17, 141, 163-64. Morize points to the influence of Melon and Mandeville upon Voltaire's conceptions of luxury. Voltaire, though a critic of the physiocratic tax theory, and slightly protectionist, admitted the basic importance of agriculture, and favored commercial liberty. For Voltaire's chief criticisms of the physiocrats see his *L'homme aux quarante écus* (1767). Here (*Œuvres*, XXXIV, 61-65) he condemned monasticism as an important check to propagation. The editor of the 1784 edition of Voltaire's works (*Œuvres*, Paris, 1784, XLV, 58 n.), though a critic of monasticism charged Voltaire with exaggerating its effects since "the number of men depends essentially upon the quantity of subsistence."

⁸⁰ *A Philosophical History of the Settlement and Trade of the Europeans in the East and West Indies*, trans. J. O. Justamond (London, 1798). First published in 1770, this work went through fifty-four editions by the end of the eighteenth century. See D. D. Irvine, *Journal of Modern History*, III (1931), 576; also A. Feugère, *L'Abbé Raynal* (Paris, 1922). Raynal's work was an attack both upon slavery in the colonies and upon the Church, and a defense of the view that good legislation will assure human happiness. Raynal, a humanitarian, a critic of despotism, and a defender of liberty, accepted the physiocratic views on property and production in part (*Sée, L'évolution*, pp. 299-304).

⁸¹ *Philosophical History*, VI, 106, 411.

⁸² *Ibid.*, VI, 397-401.

⁸³ *Ibid.*, VI, 402-04. Earlier he had said: "Has the world been more peopled at one time than another? This is not to be ascertained from history, on account of the deficiency of historians in one half of the globe that has been inhabited, and because one half of what is related by historians is fabulous" (*ibid.*, VI, 397).

⁸⁴ Under the head of ancient obstructions he placed such checks as were operative in Asia (famine, war, and pestilence [*ibid.*, VI, 398]), and as had checked the growth of the Indian population under Jesuit control in Paraguay (war with the Indians and

property ownership were unfavorable to propagation. Improvement of land and of its cultivation was checked by primogeniture and entail, and by the fact that the clergy held so much land under inalienable ownership. Concentration of ownership checked population in two ways. First, the land was diverted to a large extent to animal breeding, hunting preserves, and the providing of wood for fuel and buildings, and away from the production of provisions. Second, given few landowners, the many were in poverty and uncertain of their future subsistence, and the poor were "afraid of breeding a race of wretched beings."⁸⁵ Other modern checks included celibacy;⁸⁶ the misery and destruction of members of outlawed faiths caused by religious intolerance; the diversion of large proportions of the men and resources of nations from economically productive activity into the army;⁸⁷ the indolence, effeminacy, and debauchery which attended the multiplication and spread of luxury;⁸⁸ and the growth of towns wherein population could not maintain itself.⁸⁹

Noting that population grows only when men are happy⁹⁰ and that France's population was growing very slowly,⁹¹ Raynal predicted that whereas America was destined to experience a great multiplication of her healthy and robust people,⁹² Europe,

Portuguese, smallpox, damp climate, unhealthful eating habits [*ibid.*, III, 180-82]). He denied that celibacy, oppression, absence of private property, or work in the mines had checked the growth of Paraguay's population, saying that in the absence of the checks listed above, the abundance of provisions, absence of debauchery, early marriage, and desire for children would have produced a considerable population (*ibid.*, III, 176-80).

⁸⁵ *Ibid.*, VI, 404-05.

⁸⁶ The clergy not only were unfruitful but wasted time and resources. Raynal advocated suppression of celibacy among the regular and the secular clergy (*ibid.*, VI, 407-08).

⁸⁷ *Ibid.*, VI, 406-08.

⁸⁸ The debauched lower classes were deferring marriage and producing fewer and weaker children. Libertinism was increasing among both the tradesmen and the wealthy. All, motivated by the desire for wealth and pleasure, sought sexual satisfaction outside marriage, and often squandered on luxury such wealth as they obtained (*ibid.*, VI, 106, 410). Raynal did not condemn luxury as such, but only its abuse, for elsewhere (II, 312-15) he opposed sumptuary legislation, saying that the desire and freedom to procure enjoyment "are the only two springs of industry," and that man is bound only to live within his means.

⁸⁹ *Ibid.*, VI, 106-07.

⁹⁰ "The point is not to multiply men, in order to make them happy; but it is sufficient to make them happy, that they should multiply" (*ibid.*, VI, 411). Raynal was opposed to propagation for the sake of propagation.

⁹¹ *Ibid.*, VI, 106-07.

⁹² Colonial rural life was that "best suited to the health and increase of the species"

with its land all taken up and its income level low, would experience little growth.⁹³

II

Although nearly all the writers included in this chapter recognized that population growth is conditioned in a large measure by the supply or accessibility of subsistence, several emphasized the comparative rigidity and nonvariability of the relationship between numbers and subsistence, in particular Buffon, Brückner, and Grimm.

Buffon (1707-1788) reasoned that the number of men inhabiting a representative area tends to remain fairly constant through time, despite frequent oscillations in the actual number about what may be called the equilibrium level. "Innumerable causes of destruction" served to reduce the "product" of the "unlimited fecundity" of each species of natural life "to a determined measure, and [to] preserve, at all periods, nearly an equal number of individuals in each species." Excesses of men, as of animals, appeared, only to "vanish without augmenting the common flock"; deficits were occasioned, only to be repaired. The number of "the human species . . . continues always the same," because the conditions that support it remain fairly constant.⁹⁴

The number of men, like that of all other animals, ought, at all periods, to be nearly the same, since it depends upon the equilibrium of physical causes; and this equilibrium, to which everything has long

(*ibid.*, VI, 108). "In less than two centuries, North America will arrive at an immense degree of population, unless its natural progress should be impeded by obstacles which it is not possible to foresee" (*ibid.*, VI, 107). In one place (VI, 97), however, Raynal suggested that the colonists in North America had degenerated physically. This opinion, which was expressed even in the nineteenth century (see my article, *American Sociological Review*, I, 1936, 916-17 nn.), had been expressed by the Abbé de Pauw, who said that the American climate weakened the health and the fecundity of European strains who settled there (*Recherches philosophiques sur les Anglo-Américains*, Paris, 1770, I, 105-07).

⁹³ "Competition, which arises from the multitude of workmen, lowers the price of labour, and the smallness of profit takes away the desire and the hope of, as well as the abilities requisite for, increase by marriage. Such is the present state of Europe" (*op. cit.*, VI, 107).

⁹⁴ Count de Buffon, *Natural History*, trans. in 1812 by W. Smellie (London, 1891), IV, 139-40; also III, 162, where Buffon said that excessive fertility in Africa was counterbalanced by excessive mortality. P. Flourens accredited Buffon with formulating three laws of fecundity: (1) that fecundity is inverse to the magnitude of the animal; (2) that, except under conditions of polygamy, male births exceed female births; (3) that domestication increases fecundity (Flourens, *Des travaux et des idées de Buffon*, Paris, 1850, pp. 102-08). Buffon's work was completed between 1749 and 1767.

been reduced, cannot be infringed either by the efforts of men, or by any moral circumstances, which are only particular effects of these physical causes. Whatever care man may bestow on his own species, he will never render it more numerous in one place, but at the expense of an equal diminution in another. When any portion of the earth is overstocked with men, they disperse or destroy each other, and often establish such laws and customs as give too great a check to this excess of multiplication. In remarkably prolific climates, as in China, Egypt, and Guiney, the inhabitants banish, mutilate, fell, or drown their offspring. In France, and other Catholic countries, they are condemned to perpetual celibacy. Those who exist, usurp easily the rights of those who have no existence: Regarding themselves as necessary beings, they annihilate those which are contingent, and, for their own convenience, suppress future generations. The same restrictions are laid upon man, without his perceiving it, as are imposed upon the other animals: We cherish or multiply, neglect or destroy our species, according to the advantages or inconveniences which result from them: And, as all moral effects depend upon physical causes, which, ever since the earth acquired its consistence, must likewise be constant and unalterable. Besides, this fixed state, this constant number, imply not absolute quantities. All physical and moral causes, and the effects that result from them, are balanced, and comprehended within certain limits, which are more or less extended, but never to such a degree as to destroy the equilibrium. As the whole universe is in perpetual motion, as all the powers of matter mutually act upon and counterbalance each other, every effect is produced by a kind of oscillations, to the middle points of which we refer the ordinary course of Nature, and the extremes are those effects which are farthest removed from that course. Hence we find, that, both in animals and vegetables, an excessive multiplication is commonly followed by sterility: plenty and scarcity alternately succeed each other, and often so quickly, that a tolerable judgment may be formed of the produce of one year by that of the preceding years. . . . But the causes of destruction and sterility immediately succeed those which give rise to a redundant multiplication. Neither is this destruction occasioned by contagion: It is a necessary consequence of too great a mass of animated matter collected in one place. In every species, there are particular causes of death, . . . which are sufficient to compensate the excess of preceding generations.⁹⁵

⁹⁵ *Natural History*, IV, 140-42. Because man's rate of natural increase was less than that of many animals, his number fluctuated relatively less (*ibid.*, IV, 139).

Although Buffon noted that, with man's emergence from savagery, the natural limits to the numbers supportable on given areas had increased, and implied that further dynamic changes might again raise these limits, he believed that numbers quickly adjusted themselves to whatever new limits were established and then oscillated about these limits.

Population depends more on society than Nature. Men would not be comparatively so numerous as the savage animals, if they were not united, and derived not mutual aid and succor from society. . . . But though population be a result of society, it is the increased number of men which necessarily produces their unity. . . . The want of civilization in America is owing to the paucity of its inhabitants.⁹⁶

I must again remark, that this reasoning is not to be understood in an absolute or even in a strict sense, especially with regard to those species which are not left entirely to the guidance of Nature. Man, and the other animals he has taken under his protection and care, are more abundant than they would be without the attention he bestows on them. But, as this care also has its limits, the augmentation which results from it has long been confined by immutable boundaries. And though, in civilized countries, the human species as well as domestic animals, are more numerous than in other climates, they never multiply to excess; because, whenever they become incommodious, their number is diminished by the same power that produced them.⁹⁷

His reasons for deriving this conclusion are not wholly clear. He must have supposed: (1) that since man's sexual proclivity was instinctive, rather than "under the command of the mind,"⁹⁸ the relative frequency of sexual acts was fairly constant;⁹⁹ (2) that preventive checks were without long-time influence upon numbers,¹⁰⁰ or that the standard of living was fairly constant;¹⁰¹ (3)

⁹⁶ *Ibid.*, III, 170.

⁹⁷ *Ibid.*, IV, 142-43.

⁹⁸ *Ibid.*, II, 427; also 423.

⁹⁹ Buffon observed that both the appearance of puberty and fecundity are conditioned by the quantity and quality of food (*ibid.*, II, 411; VII, 398).

¹⁰⁰ Buffon said little of checks. He referred to the practice of abortion in Formosa (III, 90-91), and to the inability of viviparous animals to conceive while suckling their young (II, 256). "The most libidinous females will be the least fruitful, because they throw out of the body that fluid which ought to remain in the uterus for the formation of the foetus. [This explains also] why common prostitutes seldom conceive [and] why women in warm climates, who have more ardent desires than those of colder regions, are less fertile" (II, 250). Elsewhere (II, 395-96) he said that diseased nurses spread venereal disease to the children whom they suckled, often in-

that, in consequence of (1) and (2), numbers adjust themselves to the available supply of subsistence.¹⁰²

A thesis similar to that of Buffon permeates an anonymous *mémoire*, published in 1761, and colors John Brückner's *Théorie du système animal*, published in 1767. The anonymous author argued that since Nature is invariable in her operation, the quantity of subsistence and the number of men on a given territory remain unchanged, even though subject to temporary fluctuations. "Nature contradicts (dement) it [an increase or decrease in population] by her constant and invariable way of proceeding, which is to nourish always the same number of men with the same quantity of grain, & to cause to be produced eternally the same quantity of grain upon the same extent of cultivated soil."¹⁰³ The author denied that France had experienced depopulation, offering as evidence the great and increased amount of land in use in France,¹⁰⁴ and declared that France had a permanent fund of population of about twenty millions,¹⁰⁵ which number not only would not diminish, but, given France's excess of land, could increase appreciably.¹⁰⁶

fecting "whole villages," and that the milk of nurses could not be so easily digested by infants as that of their own mothers, which was naturally more suited to infants.

¹⁰¹ Actually he did not believe the standard of living to be constant. He subscribed to the psychological doctrines of Locke and Condillac (Flourens, *op. cit.*, pp. 109-12); noted variations by class in attitudes toward manual labor (*Natural History*, II, 466); and observed that marital fertility varied from community to community, and that families were generally larger "among the common people" than among the "bourgeoisie." See *Œuvres complètes de Buffon* (Paris, 1836), IV, 347-52, where he summarizes statistical findings for France for 1709-66. In another paper (*ibid.*, IV, 268-69) he clearly recognizes both the law of diminishing utility, and the expansibility of the standard of living.

¹⁰² He observed, specifically, "that in the human species fecundity depends upon the abundance of subsistences, and that dearth produces sterility"; that lack of nourishment reduced natality and increased mortality; that mortality was greater in hard winters (*Œuvres*, IV, 345, 353). He noted, also, that mortality was greater in rural areas than in Paris; that urban populations often were kept intact only through immigration; and that the greater frequency of births in the first quarter of the year was due to the fact that "the warmth of summer contributes to the success of generation" (*ibid.*, IV, 353, 355, 346).

¹⁰³ "Mémoire sur la population & le revenu territorial de la France," *Journal de commerce* (Brussels, 1761), VI, 12-38. Citation and argument on pp. 14-15, 18-19. The quotation cited is identical with a passage in De Serionne ([*Les intérêts*, etc., III, 310], see Chapter VIII, below); the line of argument is very similar to that of De Serionne.

¹⁰⁴ *Op. cit.*, VI, 16-17.

¹⁰⁵ *Ibid.*, VI, 24. Vauban is cited frequently.

¹⁰⁶ *Ibid.*, VI, 35.

In his discussion of checks to population growth this author said that losses caused by factors other than emigration and great mortalities are quickly repaired. Ten years of peace and health suffice to repair momentary diminutions occasioned by war, epidemics, and bad tax policies. Natural increase and foreign immigration had served to offset the emigration of the Protestants. Luxury production provided many with employment, thus offsetting the effects of celibacy traceable to the desire for luxuries. The French colonies not only sent to France enough of their natural increase to offset emigration to the colonies, but provided work for many without means and thus facilitated marriage. Navigation employed relatively few men, and most of them were married and had large families. Military and ecclesiastical celibacy are described as ineffective checks.¹⁰⁷

Brückner (1726-1804), in part a disciple of Buffon and Montesquieu, indicated that the "law of multiplication" establishes such "just proportions" or balance among all species as natural and artificial conditions permit. "For in the animal world, as in the vegetable, the species can subsist only in a certain proportion with the extent of terrain that they occupy: from that time that the number of their individuals exceeds this proportion, they decrease and perish; because everywhere, where there is superabundance of life, there is dearth of nourishment."¹⁰⁸

In larger measure than Buffon, Brückner conceived of the balance of nature in dynamic rather than in static terms. Under primitive conditions population was necessarily sparse; violence, rapine, and murder, occasioned by the pressure of hunger, serving, along with other factors, to check further growth. Given a flourishing agriculture, and laws and institutions favorable to the arts and sciences, and to manufacturing and commerce, numbers are great, for the domestic supply of subsistence is large, and further supplies are obtainable through commerce. Whether or not further population growth is conducive to the general welfare,

¹⁰⁷ *Ibid.*, pp. 15, 19-23.

¹⁰⁸ *Théorie*, p. 79. Brückner, who was a Lutheran clergyman, pointed to the high mortality of man in crowded misery-ridden cities as an instance of the checks upon man's multiplication. Stangeland, who ranks Brückner with Süßmilch, found that Karl Marx was the first especially to notice Brückner's work (Stangeland, *op. cit.*, p. 233).

therefore, turns, Brückner said, on the extent of a nation's natural advantages, and on the degree to which the population has approached the limits set by these advantages; when these limits have been reached, attempts to augment the population are futile, merely increasing misery and mortality.¹⁰⁹ In short, then, various checks counterbalance the "law of multiplication" and restrict numbers to an equilibrium level which at times may be rising.

Checks to population growth—essential, under all conditions, to progress and happiness—varied with circumstances, even though, at all times, they tended to assume the shape of want of food (which often caused strife and war), famine, and pestilence. In primitive cultures war, famine, and pestilence acted in combination to limit growth. In more advanced cultures, wherein war, famine, and pestilence were restrained by the arts and sciences, other checks became operative: luxury, idleness, moral decay, sensuality, dangerous occupations, etc., which increased mortality or reduced fertility.¹¹⁰ Brückner's analysis suggests, therefore, that, despite his failure to mention specifically the influence of a moral restraint inspired by prudence, he looked upon the checks operative among advanced peoples as much more psychological and preventive in character than the physical checks operative among primitives, and regarded the standard of living as dynamic.

Messance's *Recherches* (1766)¹¹¹ inspired the most extensive of the several discussions of population problems in the celebrated correspondence (1753-1790) of Baron F. M. von Grimm (1723-1807). An intimate of the philosophes, Grimm looked upon population growth as a result, not a cause; and upon Messance's study as a refutation of the opinion, very widely held (Grimm said) by all groups and classes for fifteen years, that the French population had diminished and was diminishing. He expressed regret, however, that Messance had not settled the controversy over whether or not the French rural population had grown, and

¹⁰⁹ *Théorie*, pp. 81-82; Stangeland, *op. cit.*, pp. 234-35.

¹¹⁰ *Théorie*, pp. 111, 113; Stangeland, *op. cit.*, pp. 235-37. "The arts and sciences," he said, on the one hand produce effects which "multiply the human species," and on the other hand, bring "hidden poisons, which retard progress, and which serve as correctives for the excess" multiplication occasioned by the arts and sciences.

¹¹¹ See Chapter VII for a discussion of this work.

added that there could be no wholly sound discussion of the population problem until a complete science of government and administration had been developed.¹¹²

Throughout Grimm's many discussions there runs the proposition that man's multiplicative tendency overcomes all obstacles placed in its path. It requires years of torment to drive men from their natal lands. "The act of propagation, besides, is so conformed to the view of nature, it invites with an attraction so powerful, so repeated, so constant, that it is impossible for the majority to escape it." Moreover, Grimm reasoned, since any one sexual conjunction is equally suitable (Grimm wrote before the "safe period" was rediscovered) to form an offspring, and since man's powerful penchant to this act causes him to repeat it very frequently, one is driven to the conclusion that "despite all resolutions and contrary systems, it is impossible for men to deceive the will of nature in a manner capable of sensibly influencing the population."¹¹³ Grimm concluded, therefore, that bad government could not depeople a country so rapidly, or in the same proportion, as good government could people it.¹¹⁴

For similar reasons, Grimm rejected the view that luxury could depeople a country, a view held, he said, by all political writers.¹¹⁵ Of the three classes composing a nation, the misery-ridden mass who lived by laboring was very numerous, whereas both the very wealthy and those with a mediocre and limited for-

¹¹² Grimm, *Correspondance* (Paris, 1813), Part I, V (1766), 316-17, 323-24.

¹¹³ *Ibid.*, Part I, V, 318-19. Grimm must have known of contraceptive practices, for he referred to control of family size (*ibid.*, V, 319, also Part I, I, 391), and expressed contempt (*ibid.*, I, V, 229-30) for Jean Astruc, venereal specialist, to whom the use of the sheath was known (Spengler, *Marriage Hygiene*, III, 1936, 71). The *bidet*, which appeared in France about 1710, had become universal by 1790 (Arthur Young, *Travels in France*, Everyman ed., p. 324).

¹¹⁴ *Correspondance*, Part I, V, 318-20. Messance's findings, said Grimm, did not prove the French government good (*ibid.*, V, 323).

¹¹⁵ Commenting, in 1762, upon *Le luxe considéré relativement à la population* (Lyon [see Chapter IV]), Grimm observed that luxury was being condemned on all sides, whereas thirty years earlier it was defended on all sides (*Correspondance*, Part I, III, 231). Two years later, in a comment upon Saint-Lambert's *Essai sur le luxe*, a work lacking solidity, in his opinion, Grimm said there was much useless argument as to whether luxury was good or bad (*Correspondance*, Part I, IV, 1764, 54). Grimm said little of the relation of luxury to population growth in his comments upon the works of F. de Villeneuve (*ibid.*, Part I, III, 1763, 382-83), Mably (*ibid.*, Part III, III, 1784, 62), and S. de Meilhan (*ibid.*, Part III, IV, 1787, 334).

tune were few in number. There was to be found in any nation, therefore, only a small number of citizens who, enjoying a limited fortune not susceptible of increase, feared to burden themselves with children and family cares; and a vast number of citizens, whose lot was hopeless, or on the verge of hopelessness. Accordingly, when misery increased, either because of general misfortune or because of increases in inequality which deprived the masses of part of their usual incomes, the ranks of those without hope were swelled by the addition of those theretofore in a condition not wholly devoid of hope and the possibility of improvement. Wherefore multiplication increased in a greater degree than mortality. "None peoples as ['slaves,' or 'the destitute'] do: they have nothing to lose, they cannot render their condition worse than it is. Why should they refuse themselves the sole pleasure that is permitted to them to enjoy?" Grimm concluded, therefore, that within limits, misery, whether attributable to bad government or to a growth in such inequality as gave rise to luxurious consumption on part of the few at the expense of the many, "can occasion an increase of population."¹¹⁶

Despite his comments upon the influence of luxury and bad government, Grimm apparently believed that economic abundance and good government were favorable to population growth. He seems to have accepted Mirabeau's dictum that there is a necessary proportion between the number of inhabitants and the production permitted by the climate and soil.¹¹⁷ Grimm attributed the high mortality among Paris foundlings to insufficiency of food and care, and approved Marbois' list of the causes of

¹¹⁶ *Ibid.*, Part I, V (1766), 319-20. Elsewhere Grimm contradicted this thesis. In a discussion of Cantillon's *Essai*, in 1755, Grimm said that luxury developed independently of the will of the people, and, by raising living standards and the land required per person, reduced the frequency of marriage and population growth. "Luxury also obliges the fathers of families to take precautions against too great an augmentation of their family" (*Correspondance*, Part I, I, 389-91). Several years later (*ibid.*, Part I, II, 1759, 405), in a comment on Plombaine's *Vues politiques sur le commerce*, Grimm observed that luxury was depeopling the countryside. In comments upon the works of Goudar (*Correspondance*, Part I, II, 1756, 98) and Mirabeau (*ibid.*, II, 242) Grimm indicated that luxury checked population growth.

¹¹⁷ See comment on *L'ami des hommes*, *Correspondance*, Part I, II (1757), 240-44. Grimm here favored freedom of commerce in grain and criticized Mirabeau for including only luxury and not factors such as war and celibacy, among the checks to population growth.

infant mortality in Russia, causes associated in large part with misery.¹¹⁸ Grimm admitted that while populousness was evidence, but not proof,¹¹⁹ of the goodness of government, good government and liberty¹²⁰ were favorable to population growth.¹²¹ He observed, finally, that a state might contain so many people, relative to its resources, that emigration would prove essential to the restoration of balance. "The means of subsistence, within a limited space, are not without limits. It is then desirable that such a country be disembarrassed of the too great number of men with which it is surcharged, and there will necessarily be established, without any human power able to hinder it, an emigration advantageous even to the country from which it goes."¹²²

Within the limits already implied, Grimm favored population growth, inasmuch as he believed such growth conducive to the development of communal wealth and power; but he did not indicate with precision the extent to which population growth was desirable. He commented favorably upon Goudar's thesis that population growth should be stimulated and that immigration should be encouraged.¹²³ He rejected Dutot's thesis that the number of inhabitants is proportional to the amount of specie in a state, saying that the amount of specie adjusts itself to the number of inhabitants.¹²⁴ He characterized as an absurd "sophism"

¹¹⁸ See comment on Marbois, *Essai sur le commerce de Russe, Correspondance*, Part II, IV (1778), 191-92. Grimm questioned the opinion, held by Marbois and by many French writers, that children acquired venereal disease from their mothers, and from the milk of their nurses (*ibid.*).

¹¹⁹ Elsewhere (*ibid.*, Part I, V, 291) he said that India's immense population was not a sign of the "happiness" of the people. He also expressed doubt that the Chinese exposed children as cats, saying that child mortality was probably greater in Europe than in China (*ibid.*).

¹²⁰ Liberty is not here defined. Later Grimm repeated, with apparent approval, M. Hennet's argument (in *Du divorce*)¹ that the right to divorce was favorable to population growth, inasmuch as divorce would permit the fertile mate of a sterile husband or wife to dissolve marriage and secure a fertile mate (*Correspondance*, Part III, V, 1790, 343, 345).

¹²¹ *Ibid.*, Part I, V (1766), 317-18.

¹²² *Ibid.*, V, 320-21; see also Part I, II (1756), 103, where he says that overpopulation conduces to misery and death from hunger. He opposed penal laws against emigration, saying they were futile. He observed, too, that if the government were just, men would not emigrate, and that voids created by emigration are rapidly repaired (*ibid.*, Part I, V, 1766, 321). Emigration was never harmful unless, as in the case of the Protestant emigration occasioned by the revocation of the Edict of Nantes, it carried out the most useful citizens (*ibid.*, V, 322-23).

¹²³ *Ibid.*, Part I, II (1756), 102, 209, 211; also *ibid.*, I (1755), 326-27, 329.

¹²⁴ Part I, II (1756), 103-04.

the common opinion that France would be better off with sixteen than with twenty million people. This opinion assumed that the excess four million were consuming products that would otherwise be available to the sixteen million; it ignored the fact that these four million were producers; it took no account of the fact that often a great increase of the population in a given area makes possible an increase in the level of economic activity sufficient to augment both individual comfort and happiness and the common weal.¹²⁵ He stated, however, that if the population became too large, relief through emigration would be necessary.¹²⁶

Grimm said little that was specific relative to the comparative effects of industrial and agricultural development upon population growth. He praised Goudar's defense of agriculture,¹²⁷ and ridiculed and criticized the physiocratic "cult."¹²⁸ He copied with apparent approval a manuscript of Benjamin Franklin in which agriculture is characterized as morally superior to commerce, and a kind of labor theory of value for purposes of exchange is defended as providing the basis of "just price."¹²⁹ On the whole, therefore, Grimm seems to have attached most importance to agriculture.

In 1775-81 the Abbé Theodore A. Mann (1735-1809) presented three papers before the Académie impériale et royale des sciences et belles-lettres de Bruxelles, in the course of which he followed the general line of reasoning of Buffon, Brückner, and Grimm, and clearly anticipated Malthus.¹³⁰ In the last of these papers

¹²⁵ *Ibid.*, Part I, V, 321-22. Whether he had division of labor in mind is not evident.

¹²⁶ *Ibid.*, V, 322.

¹²⁷ *Ibid.*, Part I, II (1756), 94-103, 208-11; he also praises agriculture in *ibid.*, I (1755), 326, 329; II (1757), 241.

¹²⁸ *Ibid.*, Part I, V (1767), 482; Part II, I (1770), 14; Part III, I (1775), 49-51.

¹²⁹ *Ibid.*, Part II, V (1780), 62-65. This manuscript was a copy of Franklin's "Positions To Be Examined Concerning National Wealth," written in April, 1769 (A. H. Smyth, *The Writings of Benjamin Franklin*, New York, 1907, V, 200-02).

¹³⁰ The papers are entitled: *Mémoire sur les moyens d'augmenter la population et de perfectionner la culture dans les Pays-Bas Autrichiens* (1775); *Dans un pays fertile et bien peuplé, les grandes fermes sont-elles utiles ou nuisibles à l'État en général?* (1780); *Réflexions sur l'économie de la société civile et sur les moyens de la perfectionner* (1781). The first two papers are published in the *Mémoires de l'académie impériale*, IV, 163 ff., 203 ff.; a summary of the third appears in *ibid.*, V (1781), xii-xiv. A summary of Mann's views, based on the two articles and the summary and the original manuscript of the third, was presented by J. J. Thonissen in 1871. See his "Un précurseur de Malthus," *Bulletin de l'académie royale des sciences, des lettres et des beaux-arts de Belgique*, 2d ser., XXXI (1871), 435-49. I have followed this summary, as has Stangeland (*op. cit.*, pp. 321-24).

Mann developed an essentially pessimistic thesis, much as had Wallace in England two decades earlier. Whether the views of Mann or the pessimistic views of Wallace were known to any of the later French writers it is impossible to determine from the works of the latter. Certainly the Malthusian thesis was not clearly posited and attacked or supported by any French writers, with the possible exception of Condorcet. The latter did recognize—whether because of his study of Turgot and the physiocrats, or because of familiarity with the pessimistic doctrines of Wallace and Mann, is not determinable—that unless curbed, the tendency of man to multiply could destroy all the fruits of progress; but he found an escape in the diffusion of education.

Mann's views underwent a marked change. In his first paper, in which he quotes from Mirabeau's *L'ami des hommes*, Mann says, on the one hand, that the earth always produces in proportion to the human labor bestowed on it; on the other, that population grows as subsistence increases. He said further that the power and wealth of a state were proportionate to its population.¹³¹ In his second paper he is at most a very qualifying populationist. "A numerous and laborious people, in a country which abundantly supplies their needs, makes the wealth and welfare of the state." Statesmen, he indicates, should endeavor to establish such an equilibrium between numbers and wealth as will normally assure comfort to all so long as the population is laborious; they may favor population growth only on condition that the new increments of population can secure employment and satisfy their indispensable needs. If, on the contrary, the population is as large as can be supported, statesmen must not seek to stimulate its growth; instead, they should recommend to the people that they moderate their desires and be prudent. For if population becomes superabundant in a country, and the excess portion does not emigrate, the labor of the people will not furnish sufficient subsistence, and competition will reduce wages to a very low level; misery, discouragement, disease, and vice will operate to check population growth and eliminate excess numbers. In short, when numbers have become too large, a part of the population must choose emigration or death.¹³²

¹³¹ Thonissen, *op. cit.*, pp. 439-41.

¹³² *Ibid.*, pp. 442-44. Even among nomadic and barbarous peoples, who do not

In his last paper he indicated that the diffusion of useful knowledge, the introduction of new branches of commerce and of new methods of conserving the food supply, the division of lands, and the development of agriculture were favorable to population growth; but these means, he implied, could not serve to augment the food supply continually and in the proportion that population could grow when the *mœurs* remained good.

In a well regulated state, can it come to pass, in all cases, that the means of subsistence remain in equilibrium with the highest possible degree of increase of population?

This equilibrium is evidently impossible among a people where the *bonnes mœurs* prevail, because population naturally increases in an indefinite progression, whereas the means of subsistence are necessarily limited by the soil.¹³³

In short, even though Mann did not see the full implications of his principle of population,¹³⁴ he implicitly posited the problem Malthus was later to make explicit; and he set up a problem for which both those who believed in continued progress and those who favored egalitarian reforms had to find a solution.

III

Whereas Voltaire and Montesquieu anticipated only limited progress, and Buffon and Grimm remained essentially pessimistic, the Abbé de Saint-Pierre, Helvétius, D'Holbach, Chastellux, Condorcet, and others, either detected a meliorative trend in social evolution, or concluded that, given appropriate circumstances, the human lot would become better.

Chronologically first among the philosophes, the Abbé de Saint-Pierre (1658-1743) was also the first to expand the concept of progress in knowledge "to embrace progress toward social perfection,"¹³⁵ to express faith in the infinity of progress, and to

make the best use of their resources, suffering and degradation reign, but in a lesser measure than in countries marked by population pressure (*ibid.*, p. 443).

¹³³ *Ibid.*, pp. 445-46.

¹³⁴ He did show that in light of this principle, religious celibacy was not condemnable as a check to population, but was rather to be sanctioned. This same argument was employed by several French Catholic writers following the publication of Malthus' *Essay*. See my "French Population Theory Since 1800," *J. P. E.*, XLIV (1936), 743-45.

¹³⁵ Bury, *op. cit.*, p. 128. No belief operated with as much force, in the eighteenth

propose the reforms necessary to bring it about. Since culture and knowledge were cumulative, he believed, an untrammelled human reason (i.e., the reason of the wise and the talented) operating through the medium of law and government, would prove ever more effective in molding and improving morals, and in achieving whatever objectives were useful to man and society. It was but necessary that the main obstacles to the application of knowledge (i.e., war, superstition, and the disregard and dislike of rulers for talented and scientific political thinkers) be removed.¹³⁶

The lineal intellectual ancestor of Condorcet and Godwin, whose works precipitated Malthus' *Essay* and for decades fixed the framework within which population questions were formed, Saint-Pierre presented the problem in similar terms. Unhaunted by a Malthusian spectre, he did not anticipate, at least for thousands of years, any progress-destroying population growth. The world, he believed, could support many times its nine hundred million.¹³⁷ France contained about nine times more cultivatable land than was needed to feed her population (i.e., twenty million); Europe, ten times; Asia, thirty; Africa, fifty; and America, a hundred. Moreover, population grew very slowly, being held in check by civil and foreign wars, epidemics, famines, floods, earthquakes, shipwrecks, and doubling only once each twelve hundred years.¹³⁸ Twelve thousand years hence, therefore, the

century, to make possible and bring about change as that in progress and improvability. Although Odus de Odis (*De Coenae et Prandii Portione*, Lyons, 1538, dedicatory epistle) expressed amazement at the supposed fact that the men of his day were not much advanced beyond the ancients in culture and knowledge, and attributed this lack of progress to an improper use of food and drink (Prentice, *op. cit.*, pp. 140-41), the subject of progress apparently did not receive a great deal of attention before the late seventeenth century, and the preconditions to progress were not tentatively isolated. In eighteenth-century France, particularly in the second half of the century, many writers believed in cultural progress, and several outlined doctrines of "creative evolution" (Lovejoy, *op. cit.*, chaps. vii-ix; also B. Willey, *The Eighteenth Century Background*, London, 1940). On Christian optimism see E. Gilson, *The Spirit of Mediaeval Philosophy* (London, 1936), pp. 126-27. For a critical account of theories of progress see P. A. Sorokin, *Social and Cultural Dynamics*, IV (New York, 1941).

¹³⁶ Bury, *op. cit.*, pp. 127-43; J. Delvaile, *Essai sur . . . progrès*, pp. 235-60.

¹³⁷ Asia, he said, contained three hundred and sixty million; Europe, Africa, and America, one hundred and eighty each; France, twenty; Paris, eight hundred thousand.

¹³⁸ Paris, in 1682, experienced a natural increase of one eight-hundredth. Allowing for bad years, therefore, twelve hundred years would be required for the population to double, the Abbé reasoned; presumably, the same rate of growth would be ex-

world would still contain excess land. Moreover, since the arts and sciences would progress as population grew, and great capital cities developed, and since one could not imagine a hundredth part of what men would invent and perfect in the next twelve hundred years to augment commodities and happiness, there was no danger of overpopulation developing short of thirty thousand to forty thousand years.¹³⁹

Population growth is always desirable, said the Abbé, so long as "the territory be sufficient for the nourishment of the inhabitants," for such growth makes for military strength, the facilitation of commerce, and the perfection of the arts and sciences.

The power of a state consists, not in the extent of its territory, but in the multitude of its inhabitants in proportion as they are more assembled, more laborious, more disciplined to war, more industrious in the arts and more usefully occupied than other peoples.

One may say that, with like number of inhabitants, a State smaller by three fourths in territory would be three times stronger and more powerful than a similar number of inhabitants spread through a territory three times larger. The reason is: firstly, that defense and attack by it are easier in a small territory; secondly, that in it commerce is easier and greater; thirdly, that in it the arts are easier to perfect, because discoveries in the arts are easier to communicate.¹⁴⁰

Saint-Pierre, although by no means a democrat in the political sense, proposed many measures, including the establishment of a

perienced in other parts of the world. Even were peace to become permanent, other plagues than war would prevent great population growth. William Petty, in 1682, had said that twelve hundred years were necessary for the population to double (C. H. Hull, *Sir William Petty's Economic Writings*, London, 1899, pp. 465-67).

¹³⁹ The above paragraph is based upon citations in Delvaile, *op. cit.*, pp. 243-44, 248, 258-59; in G. de Molinari, *L'abbé de Saint-Pierre, sa vie et ses œuvres* (Paris, 1857), pp. 185-90; in J. Drouet, *L'abbé de Saint-Pierre. L'homme & l'œuvre* (Paris, 1912), Part II. See also Saint-Pierre, *Annales politiques*, collected by J. Drouet (Paris, 1912), pp. 9, 36-45. The Abbé's works, on which Molinari's study is based, were first published at Rotterdam in 1733-37. The preliminary discourse in the *Annales*, in which many of the Abbé's theories appear, was completed no later than 1730, but not published for the first time until 1757, and then with only mediocre success, according to Drouet.

¹⁴⁰ *Annales*, p. 9. Elsewhere (*ibid.*, p. 23) he stated that wealth makes a state strong and enables it to buy men (primarily foreign soldiers and their officers) who abandon foreign lands, marry in France, and gradually become French. See also (*ibid.*, pp. 37-38, 43) his discussion of military affairs. Saint-Pierre also emphasized the economic and military advantages of numbers in his *Projet pour perfectionner le commerce de France* (*Ouvrages*, V, 215).

European league of nations and perpetual peace, founded upon the principle of social utility,¹⁴¹ and suited to augment numbers and well-being. Although he believed that anyone in extreme poverty had a positive and natural right to aid from the wealthy, he opposed granting help to able-bodied beggars, and advocated the use of poor families in the development of the colonies. He proposed that state and private funds be employed to supplement the incomes of large but needy families, and of families which raised orphans.¹⁴² Estimating that France contained three hundred thousand nuns and monks (at least one hundred and twenty-five thousand too many), and that, had priests married since the day of Francis I, France would have had forty million more Catholics, Saint-Pierre proposed that the age at which religious vows became binding be elevated; then there would be fewer but better religious celibates.¹⁴³ He was critical of all conditions conducing to luxury, indolence, and debauchery, and to the advancement of the moneyed and the sycophants, rather than the talented and the useful, saying that these factors checked progress. Although a Colbertian protectionist, he also stressed the importance of agriculture and advocated reform of the *taille* in order that rural depopulation might be checked. He advocated the elimination of all barriers to internal commerce (high duties, robbers, bad roads, and other obstacles to easy transportation), for he believed trade to create wealth, inasmuch as it enabled men to exchange the non-useful for the useful.¹⁴⁴ He observed

¹⁴¹ "He was perhaps the first systematic Utilitarian. . . . 'The value,' he wrote, 'of a book, of a regulation, of an institution, or of any public work is proportioned to the number and grandeur of the actual pleasures which it procures and of the future pleasures which it is calculated to procure for the greatest number of men'" (Martin, *op. cit.*, p. 61).

¹⁴² J. Drouet, *L'abbé* . . . , pp. 208-12, 217-18; Lichtenberger, *op. cit.*, p. 73. Workhouses were to be provided for able-bodied mendicants (De Molinari, *op. cit.*, p. 203).

¹⁴³ *Annales*, p. 10; also Schöne, *op. cit.*, p. 204; J. Delvaille, *R. H. S.*, V (1912), 24-25. In the eighteenth century many clerical and lay writers advocated that the number of religious celibates be restricted, and that the age at which final religious vows were taken be increased. E.g., see Schöne, *op. cit.*, pp. 149-50, 202, 205-06.

¹⁴⁴ *Annales*, pp. 16-17, 21-23, 36-45; De Molinari, *op. cit.*, p. 161. A good part of the French population was less usefully occupied than the Dutch and English, he said, because French maritime commerce was feeble (*Annales*, pp. 9-10). He was not opposed to luxury production and consumption as such, merely saying that such consumption should be made to serve the public good. Even undesirable forms of luxury, he admitted, had a good effect in that they gave employment to workers (Lichtenberger, *op. cit.*, p. 72).

that the French were becoming less healthy in consequence of their newer habits of amusement.¹⁴⁵

Saint-Pierre's optimism was shared in varying degrees by the philosophes. Some were content to say that if superstition were destroyed and reason enthroned, man's lot could be appreciably bettered. Others, following more directly the line of thought of Saint-Pierre and Turgot, emphasized the cumulative character of culture and foresaw marked if not infinite improvement.

Within the former category belong Helvétius (1715-1771) and D'Holbach (1723-1789), both of whom were influenced by Locke and Hobbes. Helvétius, inspirer of Bentham's utilitarianism and formulator of the principle of the greatest happiness of the greatest number,¹⁴⁶ and D'Holbach, the most uncompromising and consistent materialist among the philosophes, were alike in that they expressed the population problem in utilitarian terms and insisted that the purpose of political organization was to assure the happiness and rights of all.¹⁴⁷ While neither quite had Condorcet's faith in the future, each at times declared man's lot to be susceptible of great improvement, for each looked upon human behavior as subject to the law of self-interest and, in consequence, controllable through education, custom, government, and laws founded upon utilitarian and hedonistic principles.

Helvétius, mistakenly called "the original precursor of Malthus,"¹⁴⁸ traced out the economic and the political consequences of continued population growth, but did not thoroughly integrate his political and economic analyses or attempt a thoroughgoing solution of the population problem. Starting with the assumption of an underpeopled island, Helvétius reasoned that numbers would continue to grow until all the possible agricultural employments had been filled; that thereafter the additional and usually propertyless increments of population would either have to find employment in urban nonagricultural luxury-producing industries, or emigrate, the alternatives being destruction of the excess population by war (as in Switzerland), or recourse to such

¹⁴⁵ *Annales*, pp. 40, 42.

¹⁴⁶ In his famous *De l'esprit* (1758). See W. H. Wickwar on Helvétius and D'Holbach, in Hearnshaw, *op. cit.*, pp. 195-215, and in *Baron D'Holbach* (London, 1935); also Willey, *op. cit.*, chaps. viii-x.

¹⁴⁷ Sée, *L'évolution*, pp. 217-24.

¹⁴⁸ A. Keim, *Helvétius: sa vie et son œuvre* (Paris, 1907), p. 555.

practices as child exposure.¹⁴⁹ When the food supply of a country no longer sufficed for the support of its inhabitants, the surplus population was obliged to establish colonies abroad, or, preferably, to engage in manufacturing and exchange fabricated goods for foodstuffs.¹⁵⁰ Accordingly, even though Helvétius was not favorably disposed to luxury per se, especially when it was a result of extreme inequality and urbanization, he nonetheless opposed curbing the consumption of luxuries, because depopulation would result. For were luxury consumption restricted, those who produced luxuries and the agricultural workers who were dependent upon luxury-makers for a market for agricultural products, would be compelled to migrate to adjoining lands. Were France to suppress the production and consumption of luxuries, it would suffer the loss of about one fourth of its population, Helvétius estimated, adding that the foreign countries to which displaced luxury workers migrated would be strengthened.¹⁵¹

Population pressure operated directly, at least in France, to depress the wages of the bulk of the population to bare subsistence, one of the effects of "the extreme multiplication of citizens" being "the indigence of the greater part of the inhabitants. . . . Competition depresses the price of the day's work; the worker preferred is he who sells his labor least dearly, that is to say, who most curtails his subsistence. Then indigence spreads, the poor sell, the rich buy, the number of possessors diminishes, and the laws become more severe from day to day."¹⁵² Subsistence wages were also a result of economic inequality, itself the result in part of population pressure.¹⁵³ For when a nation had become divided into a small class of wealthy proprietors and a large class of laborers, there were more workers than work, and the workers had to be content with a wage often inadequate even to furnish subsistence. "Besides, the rich man, whose [desire for] luxury exceeds his wealth, is interested in reducing the price of a day's work, in offering to the day-laborer only the pay absolutely nec-

¹⁴⁹ *De l'homme* (1772). See *Œuvres complètes* (Paris, 1795), X, 44-48, 107. In the ancient world, he said, population pressure had caused men to practice abstinence, continence, and pederasty; in China, child exposure (*ibid.*, X, 45, 51-53).

¹⁵⁰ *De l'esprit* (1758), *Œuvres*, I, 245-46.

¹⁵¹ *Œuvres*, X, 81-85; also I, 245-46. The expenditures of the rich provide employment for the poor, he believed (*ibid.*, X, 95-96).

¹⁵² *Ibid.*, X, 48-49.

¹⁵³ *Ibid.*, X, 5-48, 55-62, 95-96.

essary for his subsistence. The latter is obliged by necessity to accept it."¹⁵⁴ That Helvétius considered economic inequality and the resultant exploitation of labor to be more important than population pressure as a cause of the lowness of wages may be inferred from his emphasis upon the need for more equal distribution of property, and from his observation that wages would not increase appreciably until the land was more equally divided and the number of proprietors was increased relative to that of laborers.¹⁵⁵

Population growth, on a given area, when continued long enough, resulted in a cleavage between employers and workers, between the governed and their representatives, and therefore between the public and the private interest. Both the luxury-loving wealthy and certain classes of employers preferred that there be a large number of persons "who, having no other wealth than their hands, are always ready to employ them in the service of whomever pays them"; for, "the more there are of indigents, the less he [the employer] pays for their labor."¹⁵⁶ Multiplication was not necessarily advantageous to all proprietors, however. The multiplication of propertyless workers could even prove contrary to the interest of the landed proprietors; for were the ruler a tyrant and not a true representative of the landed proprietors, he might arm the propertyless workers and use them against the proprietors.¹⁵⁷ Despotism, in fact, was unlikely to develop until after a country had become densely peopled.¹⁵⁸ Even in the absence of despotism the interests of the ruling class tended to differ from the interests of the governed, in especial from the interests of the landed proprietors, as population became dense. For population growth made representative government necessary, and the representatives of the governed (i.e., really of the landed proprietors), having become concentrated in the capital city and intent upon furthering their own private ambitions, ceased to give expression to the interests of the agriculturalists or to that of the

¹⁵⁴ *Ibid.*, I, 234, 233-36 and n. Seven or eight million languished in the country that five or six thousand might live in opulence (*ibid.*, I, 236-37).

¹⁵⁵ *Ibid.*, I, 235-36; X, 50-51. Tax reduction would somewhat ease the poor man's burden, but would not suffice to elevate his wages appreciably (*ibid.*, I, 234-36 n.).

¹⁵⁶ *Ibid.*, X, 56-57; also I, 234.

¹⁵⁷ *Ibid.*, X, 56-57.

¹⁵⁸ *Ibid.*, X, 40, 44, 51, 95-96.

nation.¹⁵⁹ Group and national interests needed to be kept in proper balance; otherwise, population growth, together with accompanying concentration of economic and political power, might bring about the decay of the state. For this and other reasons he at times preached the virtues of enlightened despotism.¹⁶⁰

As has been implied, Helvétius approved of luxury as a palliative for population pressure only provided that continued population growth had already brought about concentration of wealth and made necessary the maintenance of the demand for labor through luxurious consumption.¹⁶¹ Population growth did not correlate positively with luxury as such, however; for luxury usually was the product of economic inequality which was per se unfavorable to population growth. Where luxury existed commerce flourished and destroyed the lives of many;¹⁶² taxes were heavy, and the rural population suffered. Indigence weakened the needy and destroyed many of their children, whilst indolence enervated the wealthy. The population was not robust, and its growth was retarded.¹⁶³

Although Helvétius did not conceive of an optimum density of population, his discussion suggests that he desired no greater density of population than was consistent with the prevention of marked inequality and luxury. The happiness of a people, he believed, depended not so much upon the total mass of its wealth as upon the fairly equal division of wealth and income. A state was strong when its population consisted of free and independent men, or proprietors, with a "mediocre fortune"; when everyone could obtain simple but adequate and healthful nourishment. Whatever tended to produce inequality (e.g., commerce) was to be avoided, inasmuch as inequality destroyed the simple virtues, entailed poverty for the many, and resulted in infant mortality and depopulation.¹⁶⁴

¹⁵⁹ *Ibid.*, X, 52-53, 55, 57-61.

¹⁶⁰ *Ibid.*, X, 61-62. England had best coped with this problem, Helvétius believed (*ibid.*, X, 61-62 n.).

¹⁶¹ *Ibid.*, X, 95-97, 107.

¹⁶² He referred especially to the slave trade, to commercial wars, and to high mortality on shipboard and in foreign ports (*ibid.*, I, 247-49).

¹⁶³ *Ibid.*, I, 236-37, 247-51; X, 119-24. "The countries of luxury are not the most peopled" (*ibid.*, I, 247).

¹⁶⁴ *Ibid.*, X, 50-51, 61, 67, 114-15, 120, 123; I, 250-51.

While Helvétius did not specifically pose the problem, it is evident that he did not believe population pressure and its concomitants to be unavoidable; for he subscribed to no such biological determinism as Malthus was later to espouse. Men were similar in their sensibilities, passions, and potential interests; and their social and political attitudes and relationships were the product of external circumstances. It was possible, therefore, to employ education and legislation, founded upon the use of rewards and penalties, to harmonize the individual and the general interest, for the purpose of eliminating the main obstacles to the achievement of comparative equality and of the greatest happiness of the greatest number.¹⁶⁵ It was possible to use taxation and other means to bring about the desired amount of economic equality, to prevent the concentration of wealth and the division of society into useless wealthy drones and starving workers. It was possible, in short, to prevent such evils as were associated with population pressure.¹⁶⁶

D'Holbach, in his general social philosophy, took issue with Helvétius, even though he borrowed the principle of utility from the latter and, like him, viewed life and happiness as the proper end of all human activity. He had less faith in education and in benevolent despotism, upholding instead limited monarchy and the right of rebellion when the state no longer served its purpose, namely, the preservation of individual life and happiness. He stressed the differences rather than the similarities between men, and therefore attached less importance to economic and social equality, emphasizing instead that greater rewards were justified so long as the recipients were making correspondingly greater contributions to society; at the same time he urged that ownership of property be as widely diffused as possible inasmuch as only freedom, property, and security made "one's country precious." He rejected Helvétius's crude hedonism, and his corollary theory of legislation, indicating that since men tended to

¹⁶⁵ E. Halévy, *The Growth of Philosophic Radicalism* (New York, 1928), pp. 19-21.

¹⁶⁶ The general optimistic thesis summarized in this paragraph runs through both *De l'homme* and *De l'esprit*. Helvétius considered a system founded upon private property more workable than one founded upon communistic principles; he did not favor granting a voice in government to the poor and the uneducated.

disregard the welfare of their fellows, it was necessary to fix conduct by force of law, and to emphasize that virtue consists in actions that tend "towards the well-being of [one's] fellows."¹⁶⁷

D'Holbach's approach to the population question rested upon the principle that the greatest good of the greatest number must be served; therefore, although he did not suggest an income optimum population, he did think in optimum terms.

It is far more important for a nation to be happy than rich. . . . A people enjoys all the happiness of which it is capable, when, by moderate labor, it satisfies the true needs of life. . . . A nation will always be powerful when, under wise government, it enjoys a population properly proportioned to the territory it occupies. It will be sufficiently rich when, without excessive labor, its soil provides the products necessary to its existence. And its happiness will be assured when it contains courageous and virtuous citizens.¹⁶⁸

A population did not naturally assume the size, nor did its social organization naturally assume the form, consistent with the realization of the greatest happiness of the greatest number. When a people's institutions did not conform to the principles of Nature; when trade wars were common and unsanctionable inequality existed; when injustice ruled, and taxes were unduly burdensome, and agriculture suffered; when unemployment, misery, mendicity, and crime flourished: then what amounted to population pressure developed; and augmented mortality, along with emigration, checked natural increase.¹⁶⁹ Three factors, together with urbanization at the expense of agriculture, were retarding population growth, and had brought about depopulation in many countries: (1) trade, which aroused "immoderate thirst for wealth, and which created artificial needs" that could be satisfied only at the expense of the lives of many sailors and traders, and which precipitated war and thereby increased the tax burden; (2) despotism, which generated luxury, which did not trouble to remove the causes of famine and pestilence, which engaged in unnecessary wars, and which "by making peoples

¹⁶⁷ See Wickwar's excellent summary of D'Holbach's opinions in *Baron D'Holbach*; also the account of his relations with the philosophes, and of his crusade against Christianity.

¹⁶⁸ *Système sociale* (London, 1774), III, 84-85; *Politique naturelle* (London, 1773), II, 158.

¹⁶⁹ *Système sociale*, III, 37-38, 77, 83.

unhappy, . . . often stifled in them the natural instinct to be fruitful and multiply"; (3) superstition, which "filled the nations with inactive and useless men . . . [i.e., religious celibates, who] made a virtue of dying without posterity," and which destroyed many through war and persecution.¹⁷⁰ When contrary conditions prevailed, men multiplied. "Population proportions itself to the excellence of Government, to the wishes of its laws, to the fertility of the soil, to the industry of its inhabitants, to the liberty and to the security enjoyed." Rural life, in especial, was congenial to natural increase; for the country was relatively free of "the vices that are inseparable from populous societies. Solitude, moderate needs, and a quiet life, make a man honest, bind him to his country, encourage natality, and interest him in his offspring."¹⁷¹

D'Holbach admitted that population pressure might develop even though governmental and other conditions were satisfactory: "To population as to cultivation, there are limits. The happier a people is, the more it multiplies; and it can increase eventually to such an extent that its soil can no longer satisfy all its needs: it is then that one may think of planting colonies which shall remain attached to the state, shall not break away from it, and shall contribute to its strength." He rejected the mercantilist conception of colonies, stipulating that the colonies must enjoy the same advantages as the mother country. He went on to point out, however, that European countries had founded colonies to exploit them rather than to relieve population pressure, and predicted that as a result the American colonies, upon becoming strong enough, would separate from the mother countries.¹⁷² While he implied that commerce might relieve population pressure, he opposed this solution, for commerce eventually undermined nations by stimulating luxury, land constituting "the physical and moral foundation of every society."¹⁷³

D'Holbach was not opposed to luxury as such, but to the forms that luxury tended to take when unrestrained, and to many of the conditions which give rise to luxury or subsequently accom-

¹⁷⁰ *Politique*, II, 242-48, 131-36, 260-61; *Système sociale*, III, 75-76.

¹⁷¹ *Ibid.*, III, 38; *Politique*, II, 135.

¹⁷² *Politique*, II, 137-41. D'Holbach influenced Raynal.

¹⁷³ *Ibid.*, II, 150-58.

panied it. Man is a function of matter in motion, educable and pliable in sensationalist terms, and so organized that he naturally seeks happiness and survival. His wants include not only physical goods, but power, dignity, and wealth wherewith "to procure new, varied, and multiplied pleasures." His needs are not static but vary with his cultural situation. D'Holbach therefore looked upon luxury as a "natural effect of the progression of the desires and needs of men," as something that every man felt the need of in consequence of his "desire to imitate"; and he described Rousseau's proposed return to savage simplicity as a futile effort to reverse the natural trend.¹⁷⁴ At the same time he saw in un-circumscribed luxury a necessary component of a complex of elements which, acting in combination, had brought ruin and depopulation to many nations including France: pronounced economic inequality and exploitation of the masses; the elevation of wealth to the status of "principal passion"; foreign commerce and trade wars; augmentation of public debt, taxes, and the idle *rentier* class. Therefore he approved luxury only in so far as it could be satisfied in conformity with the principles of Nature and the greatest happiness of the greatest number.¹⁷⁵

Whether he expected man to triumph over the conditions which in the past had robbed him of happiness is not absolutely clear. In his *Essai sur les préjugés* (1769) he manifested a considerable, if not unlimited, optimism, whereas four years later he was more pessimistic, reasoning in the manner of some of the early Christian fathers, that man must proceed upon the assumption that reform is practicable and that improvement is probable.¹⁷⁶ The greatest happiness of the greatest number was likely to be realized, his later moral treatises suggest, in proportion as the following conditions prevailed: (1) agriculture constituted the chief source of income; (2) everyone was employed and there was no opportunity for voluntary idleness; (3) property owner-

¹⁷⁴ *Système sociale*, I, 65-66, 159-60, 192-93; III, 19; *Système de la nature* (London, 1770), I, 203, 328, 331.

¹⁷⁵ *Système sociale*, III, 67-76, 89; *Politique*, II, 145-48, 155-58, 161-64, Discours, ix, pp. 223 ff.

¹⁷⁶ *Politique*, II, 223-42, 265-80; Wickwar, *Baron D'Holbach*, 142-46, 213-20. He condemned the prohibition of divorce which made of the hymen "chains rendered indestructible by religion" (*Système sociale*, III, 125, 131).

ship was widely diffused and there was relatively little inequality; (4) representative government, in which only property owners participated, prevailed; (5) man was impelled by opinion to seek the welfare of his fellows; (6) a moderate amount of labor sufficed to provide each family with all simple and morally sanctionable wants.

Whereas Saint-Pierre forecast continuous progress, and Helvétius and D'Holbach showed that progress was possible, De Chastellux (1734-1788) sought to measure progress and to demonstrate by use of his indices that man's condition had become better. In his principal work¹⁷⁷ he sought, by comparing the lots of men at different periods in history, to determine whether or not there had been progress; and in the course of his work he reached conclusions, with respect to progress and population, anticipatory of Condorcet, the most enthusiastic of the exponents of the doctrine of progress.¹⁷⁸

Although Chastellux believed that the spread of education and liberty constituted presumptive evidence that men were as happy as, if not happier than, they had been at any time in history, he sought clinching evidence in proof of the development of population and agriculture—in his opinion the two best indices of human happiness.¹⁷⁹ Of the two he ranked agriculture first because its improvement resulted in augmentation of human well-being and a consequent increase of population.

¹⁷⁷ *De la félicité publique* [1772] (Paris, 1822). In 1770 Sébastien Mercier, a dramatist, presented a picture of the progressive future in *L'an 2440* (Amsterdam). We see a France with a population increased by one half, with a Paris rebuilt but no larger. Luxuries are virtually taboo, there are no dowries, marriages are preceded by mutual inclination, all must work a few hours a day, there are no monks, domestics, valets, and similar useless classes. Bury (*op. cit.*, pp. 192-201) believes that Mercier's work helped to popularize the idea of progress. For an account of Mercier's ideas, as developed in his other works, see Lichtenberger, *op. cit.*, pp. 193-206. Mercier was a critic of the physiocrats and of prevailing institutions.

¹⁷⁸ Concerning the ideas of Chastellux and his friendly relations with the physiocrats, Voltaire, and most of the important writers of his time, see L. Sicot, *Le Marquis de Chastellux* (Paris, 1902). Chastellux accepted the physiocrats' notion of a natural order and their criticisms of mercantilism; but he treated capital and labor as productive factors along with land, and emphasized the evolutionary character of human society. He favored an economy founded on liberty and property, and saw in competition a fairly effective check on inequality. Sicot (*ibid.*, p. 146) finds in Chastellux's belief that proportion must be observed in the growth of an economy an anticipation of Frederick List's conception of economic balance. See also n. 198, below.

¹⁷⁹ *Félicité*, II, 120.

I name agriculture before population because if it happens that a small nation cultivates with much care a great quantity of soil, it will result therefrom that this nation consumes much, and that it adds to the aliment necessary to life the comfort and the convenience from which it derives happiness. If, on the contrary, the increase of the people is in proportion with that of agriculture, what may one conclude therefrom, save that this multiplication of the human species, as that of all other species, proceeds above all things from its well-being.¹⁸⁰

It is generally true that population is the proof of the prosperity and of the power of a nation, because it is generally true that agriculture, commerce, and good legislation multiply the number of men.¹⁸¹

Chastellux then sought to demonstrate that modern agriculture and industry were superior to ancient agriculture, and that, despite Wallace's argument to the contrary, population was greater in modern than in ancient Europe. In support of the former thesis he pointed to the actual improvements in agricultural and industrial methods, to the diminution of the area in forest or swamp, and to the fact that the interest rate was lower.¹⁸² In support of the view that numbers had grown he argued: (1) that Wallace's and other data purporting to show that the ancient world had been more densely populated than the modern were false or incorrectly interpreted;¹⁸³ (2) that the available statistical data indicated that population losses caused by pestilence, but not those caused by war and bad government, are quickly repaired,¹⁸⁴ and that the population of France and other countries had grown;¹⁸⁵ (3) that agriculture and the other means of support

¹⁸⁰ *Ibid.*, II, 120-21.

¹⁸¹ *Ibid.*, II, 179.

¹⁸² *Ibid.*, II, 122-38, 144-46, 155.

¹⁸³ *Ibid.*, II, 146-55, 166, 177; n. 185, below.

¹⁸⁴ He referred in particular to the reparation of the losses occasioned by the pestilence of 1720. Peoples that had suffered heavy losses through epidemics resembled budding colonial populations, in that they multiplied at a supra-normal rate (*ibid.*, II, 140, 181). He cited Abbé Expilly, who had criticized Mirabeau's pessimism relative to depopulation, and who in 1765 had estimated France's population at twenty-four million. See Expilly, *Dictionnaire géographique, historique et politique des Gaules et de la France* (1768), avertissement and article, "Population"; also Puvilland, *op. cit.*, p. 182.

¹⁸⁵ *De la félicité*, II, 156, 169, 173-74. Chastellux cited Hume, Expilly, Messance, Vauban, Voltaire, Herbert, Petty, Price, Davenant, Templeman, and Thomas More, among others. Chastellux criticized in particular Villaret who, in his *Histoire de France*, had inferred from a manuscript of 1328 that France then contained thirty-two million. At that time, said Chastellux, France contained only thirteen or fourteen million,

had expanded;¹⁸⁶ (4) that conditions especially favorable to population growth—e.g., peace, good government, and liberty—had improved;¹⁸⁷ (5) that certain checks to population growth operated with less intensity than formerly.¹⁸⁸

Chastellux reasoned further that man's lot would continue to improve, the rate of improvement depending upon the extent to which reason triumphed over outmoded ideas, principles, and prejudices. Knowledge tended to accumulate and become more perfect. Evil was traceable to ignorance and the abuse of reason. War and oppression were attributable to inequality caused by the fact that some individuals and some peoples had progressed much more than others. Whence it followed that were "ancient ideas . . . effaced, and . . . reason finally [to] prevail over prejudices and habits," and were man to avoid the ennui and factitious wants associated with a too easy existence, man's lot would steadily become better.¹⁸⁹ Moreover, because he expected that reason would triumph, that knowledge would be perfected, that agriculture, commerce, and industry would improve, and that government would become more just, Chastellux did not anticipate, as did Malthus, the perpetuation of mass misery by continued population pressure.¹⁹⁰

whereas it contained about twenty-three million in 1772 (*op. cit.*, II, 169, 176-78). On these early estimates see my *France Faces Depopulation*, chap. i.

¹⁸⁶ *Op. cit.*, II, 144-46, 155.

¹⁸⁷ *Ibid.*, II, 161-69, 181. He proposed that convents be replaced by less exacting retreats for young and old women (*ibid.*, II, 170-72). Elsewhere (I, 29, 172, 291) he observed that a government can promote population growth by preventing dearths which often give rise to epidemics; by bettering the air through the extension of cultivation; by preserving peace; by providing good drainage, food, drink, and shelter, and thus preserving health; by enacting legislation favorable to population growth. He disapproved mercenary wet nursing, then common among working mothers (*ibid.*, I, 25).

¹⁸⁸ War had declined in frequency; governments were less despotic; the number of ferocious beasts had been reduced; slavery was far less common in the world. Chastellux, largely on the basis of Hume's evidence, reasoned that in the ancient world the cheapness of slaves had dissipated such incentive as masters had to encourage slaves to multiply, and had tended to cause masters to use slaves for onerous mortality-increasing tasks (*ibid.*, II, 140-42, 155). Elsewhere (*ibid.*, II, 170-72, 181) he listed religious celibacy, war, bad government, and pestilence as checks, and added that losses occasioned by war and bad government were not easily repaired.

¹⁸⁹ *Ibid.*, II, 240, 244, 284-86.

¹⁹⁰ Chastellux stated that the French people would be as comfortable as the British, were the road system improved, the grain trade made free, and the tax system made equitable (*ibid.*, II, 192).

As has been implied, Chastellux did not suppose the relationship between numbers and subsistence to be invariant. At times, as in Germany and in some French departments, the population was dense even though the supply of subsistence was deficient and the people were miserable.¹⁹¹ Subsistence might diminish relative to numbers, and yet numbers not decrease in consequence. For the average life of man did not tend to diminish until misery had multiplied the number of sick. "When subsistence diminishes by one sixth, for example, it does not follow that one sixth of the inhabitants die of hunger or withdraw, but these unfortunate persons consume less in general, one sixth less. . . . Unhappily for them, destruction does not accompany misery; and nature, more economical than tyrants, knows better still on how little expenditure humans are able to subsist."¹⁹²

Chastellux argued further that a too rapid rate of population growth and a too great density of population were unfavorable both to the welfare of the individual and to the strength of the state; and in consistence with the principle that the true objective is the greatest happiness of the greatest number,¹⁹³ that a nation's population be not merely large but also properly distributed and free and able to live happily.¹⁹⁴ Man's standard of life ("le tarif de la vie humaine") constituted the best measure of his felicity; for when this was high, his work was less painful and better remunerated, his health was better, and he was stronger and happier.¹⁹⁵ This standard rose when population grew at a lesser rate than agriculture, commerce, and industry; under opposite circumstances it fell.¹⁹⁶ When this standard was low and the people were miserable, a nation was weak, even though populous. When this standard was high, and men worked less and consumed more, a nation was strong, for it could obtain healthy soldiers, and in times of stress, either curtail its consumption or work more.¹⁹⁷ It is inferable, therefore, that Chastellux desired

¹⁹¹ *Ibid.*, II, 180-81.

¹⁹² *Ibid.*, II, 181-82.

¹⁹³ *Ibid.*, II, 120.

¹⁹⁴ *Ibid.*, II, 170-72 and 284.

¹⁹⁵ *Ibid.*, II, 182-83, 187-88. Chastellux pointed to the fact that housing was better in England than in France; that English workers, class for class, consumed more than the French or the Germans, were more robust and better workers, in part because men tended to work better when wages were high and the working day was not too long (*ibid.*, II, 183-86).

¹⁹⁶ *Ibid.*, II, 187-88.

¹⁹⁷ *Ibid.*, II, 187-89, 191-92.

that France have as large a population as was consistent with a high standard of life and sufficient leisure.

Chastellux recognized as explicitly as any of his contemporaries that the felicity of the masses depended in greater measure upon the state of culture of the community and upon the character and functioning of its economic institutions than upon the size of the population. The common man's standard of life was conditioned by his productivity and by the proportion of his average output taken over by the government in the form of taxes, or by the master class in the form of profits. His productivity was conditioned largely by circumstances external to the individual, while the portion he was forced to give up to government and employer was conditioned by the manner in which society and the economy were organized. In general, the common man was well off if he needed to work only a relatively small number of hours per day to provide himself with subsistence and comfort, and very little to meet the claims of the government and the employer; for then he had relatively many hours to devote to the increase of his felicity. Chastellux's analysis made it plain that if workers received only bare subsistence, the paucity of their incomes was due not to population pressure, or to "competition," but to the manner in which society was organized and power was distributed; it also made plain that the solution for human ills must be sought not in artificial schemes but in the accumulation and diffusion of knowledge and progressive social evolution.¹⁹⁸

J. H. Bernardin de Saint-Pierre was interested primarily in demonstrating that nature was beneficent, whereas C. F. Volney was concerned with showing that social decay was not inevitable. Saint-Pierre was as optimistic with respect to problems of population as with regard to other problems. Declaring that there existed "a moral intention in nature, to preserve an equilibrium in the population of nations,"¹⁹⁹ he denied the assertions of

¹⁹⁸ *Ibid.*, I, 59-71; II, 238-44, 280-86. In an interesting note (*Economica*, VIII, 1941, 203-07) W. Stark characterizes Chastellux as "a forerunner of Marxism" who anticipated Marx's conception of historical development, his materialistic interpretation, and his "whole theory of surplus value." Chastellux's essay was in a sense a reply to Mably, who believed that man had been happier in Antiquity and that society could be reconstructed along preconceived lines.

¹⁹⁹ *Études de la nature* [1784], in *Œuvres* (Paris, 1840), p. 216. Like a statistical

those who held that in the absence of checks, overpopulation would develop. "Was convent-less England overpeopled?" he retorted to those who said that France would be overpeopled but for her convents. Such an opinion "betrays besides little acquaintance with the resources of nature. The more inhabitants a country contains, the more productive it is. France could maintain, perhaps, four times more people than it now contains, if parcelled out into small freeholds."²⁰⁰ For the same reason war was not necessary to carry off "the superflux of mankind"; nor were bachelorhood and celibacy, with their evil effects, necessary. The threat of overpopulation was chimerical. Even countries so densely populated as China and Bengal contained extensive deserts which could be put to use; and there always remained the New World to which to migrate. France was far from overpopulated, the "spirit of finance" and the concentration of landownership having checked the growth of subsistence there. Were the land broken into small holdings, there would be three to four times as many crops as were then being obtained, Saint-Pierre stated, pointing in evidence, as did Prince Kropotkin decades later, to the fields about Paris.²⁰¹

Saint-Pierre proposed many reforms, all designed to remove existing evils, and many suited to stimulate population growth. Attributing epidemics to the destruction of aqueducts and canals, and to the creation of morasses, he recommended the removal of these causes of epidemics.²⁰² He also advocated reduction of economic inequality, suppression of monopoly, curtailment of manufacturing and commerce, fair treatment of colonies, breaking up of landed property, plowing under of pasture land, elimination of fallowing, and encouragement of agriculture which, by affording employment to children, facilitated marriage and propagation.²⁰³

C. F. Volney's *Ruines des empires* (1789)²⁰⁴ was in a sense a reply to those who believed that empires and peoples would always decay, since they had always decayed. He pointed out

Pangloss, he pointed to the alleged variation, from climate to climate, in sex ratio and female fecundability as evidence of the beneficence of nature (*ibid.*).

²⁰⁰ *Ibid.*, p. 234.

²⁰¹ *Ibid.*, pp. 232-35, 480-81.

²⁰² *Ibid.*, pp. 220-22.

²⁰³ *Ibid.*, pp. 422-31.

²⁰⁴ Published in New York in 1796 as *The Ruins or a Survey of the Revolution of Empires*.

that the ancient states had prospered so long as their social institutions had conformed to the laws of nature, and that then "an abundance of provision" had enabled population to increase rapidly.²⁰⁵ Decline had set in when wealth and political power had become concentrated.²⁰⁶ Given liberty, private property, and the diffusion of political and economic power, he implied, cumulating knowledge, together with its diffusion through education, would assuredly better man's lot.²⁰⁷ While Volney did not discuss population as such, he apparently assumed that, given suitable conditions, population would grow at a satisfactory rate.

The doctrine of virtually limitless human perfectibility and social progress, first formulated by the Abbé de Saint-Pierre, received its fullest development at the hands of Condorcet, disciple of Turgot, Voltaire, and A. Smith.²⁰⁸ Condorcet, moreover, specifically related the theory of progress to the problem of population, as later conceived by Malthus.

Essentially a popularizer of economic doctrines, particularly of those of Turgot, who made him Inspector of the Mint in 1774, Condorcet contributed little to economic theory as such. At first he accepted the views of Turgot and the physiocrats on competition, commerce, private property, testamentary freedom, and taxation. Like them, he favored not popular suffrage, but government by property owners; and like Turgot, he supposed that the best way to prevent poverty was to provide employment to the able-bodied poor.²⁰⁹ On wages he followed Turgot closely. Wages could never fall short of a worker's bare subsistence, nor

²⁰⁵ *Ibid.*, pp. 58, 61.

²⁰⁶ *Ibid.*, pp. 50, 68.

²⁰⁷ *Ibid.*, pp. 95-117. Elsewhere Volney denied Rousseau's belief that the life of a savage was best, saying that it involved a low level of agricultural production and was unfavorable to population growth (*A View of the Soil and Climate of the United States*, Philadelphia, 1804, pp. 384-86, 389).

²⁰⁸ Reference here is to Condorcet, *Œuvres* (Paris, 1847-49); to *Tableau historique des progrès de l'esprit humain* (Paris, 1900); and to the English translation of the *Tableau: Outlines of an Historical View of the Progress of the Human Mind* (London, 1795). Generally we have followed the last work. Condorcet's ideas and contributions are treated by J. S. Schapiro, *Condorcet and the Rise of Liberalism* (New York, 1934), and by Sée, *L'évolution*, pp. 277-97.

²⁰⁹ See Condorcet's *Vie de Monsieur Turgot* (Bern, 1787), in which he discusses many of Turgot's views. The latter's tax theory is formulated in mathematical terms by Condorcet (*ibid.*, pp. 140-47). In 1792 he wrote a paper (*Sur l'impôt progressif*) in support of a progressive income tax (E. Daire, ed., *Mélanges d'économie politique*, Paris, 1847, I, 566-72). On his politico-economic views see also Schapiro, *op. cit.*, pp. 60-61, 73, 76, 84, 161-76.

would the wage of the common laborer normally exceed what was necessary to support him and his family; they moved with grain prices, and increased or decreased as taxes on commodities increased or decreased.²¹⁰ In his attack upon Negro slavery²¹¹ he says that even though under the worst of conditions the free laborer earns more than a slave,²¹² free labor does not tend to cost more than slave labor, inasmuch as free labor is more productive; and that whereas an enslaved Negro population will not increase through an excess of births, a free Negro population will increase. Elsewhere he observed that the wages of common labor at times tended to exceed subsistence.²¹³

The fall of the Bastille (1789), Schapiro concludes, marked the turning point in Condorcet's political and economic thinking, but he did not give up his advocacy of constitutional monarchy and espouse popular suffrage, the rights of the poor, and a somewhat progressive and equalizing taxation program until 1790.²¹⁴ It is his thought of the post-1789 period, rather than that of the pre-Revolutionary period, that is reflected in his celebrated work on progress.

The change in his thinking is reflected in a paper on the influence of the American Revolution upon Europe.²¹⁵ Having enumerated what, in his opinion, were the fundamental rights of man,²¹⁶ he sounded a pessimistic note:

In reality, as the population necessarily proportions itself to the quantity of subsistence, produced in an ordinary year, one readily sees that the mass of satisfactions for the plurality of citizens is never able to be very great, at least in a constant and durable manner and thus it is in the more equal distribution of these satisfactions that public welfare

²¹⁰ *Dialogues, sur le commerce des bleds* (London, 1770), esp. pp. 111-14, 153-55, 281 ff.; *Vie de . . . Turgot*, pp. 147-49; Schapiro, *op. cit.*, p. 176. Condorcet, in his *Lettre d'un laboureur de Picardie* (1775), criticized Necker's *De la législation et du commerce des grains*.

²¹¹ *Réflexions sur l'esclavage des nègres* (1781). See secs. vi and xi.

²¹² In *ibid.*, sec. xii, however, he commented that in France the *corvées* had at times rendered the lot of some peasants worse than that of slaves.

²¹³ *Assemblées provinciales* [1788], *Œuvres*, VIII, 457.

²¹⁴ Schapiro, *op. cit.*, pp. 88-89, 171; also Sée, *L'évolution*, pp. 289-90, 292-97.

²¹⁵ *De l'influence de la révolution de l'Amérique sur l'Europe* (apparently written between 1787 and 1789 to Lafayette), in Daire (ed.), *Mélanges d'économie politique*, I, 544-65.

²¹⁶ On the great importance attached by Condorcet to the rights of man, see Sée, *L'évolution*, pp. 279-85.

must be sought; it is to maintaining or reestablishing this equality among the members of a nation, without prejudicing the right of property, without obstructing the legitimate exercise of liberty, that all civil laws must conduct, all those which have commerce as their object.²¹⁷

Freedom in international trade, he added, would tend to augment production and well-being.²¹⁸

Despite this pessimistic forecast, he saw in America, with its democratic population free of European inequality and prejudices, a place where soon more men would be engaged in adding to human knowledge than in all of Europe, and where the rate of progress in the useful arts and the speculative sciences would be at least double that in Europe. (In expressing faith in America, Condorcet but announced an opinion common to liberal and foresighted thinkers in his day; for they looked upon America, much as liberals in the 1920's looked upon Soviet Russia, as a place where their dreams would come true.) Condorcet went on to say that the lot of man could be ameliorated only through the dissipation of prejudices and the accumulation and diffusion of knowledge.²¹⁹

In his *Outlines* Condorcet expanded this view, advancing in its support a somewhat conjectural history of man's social evolution. Condorcet conceived of man as educable (i.e., as capable of receiving, combining, and preserving sensations), as guided by pleasure and pain, and as subject to the regular and constant laws operative in the past.²²⁰ Man's future social history would be an extrapolation of the past. European culture would spread and grow, as would freedom, and education would become more widely diffused; as a result, inequality within and between nations would diminish.²²¹ Man's intellectual and cultural equipment

²¹⁷ *De l'influence*, p. 547. He reasons in general that where there is no great inequality there are not many factitious needs to absorb resources and occasion emulative expenditure (*ibid.*, pp. 552-53, 563-64).

²¹⁸ *Ibid.*, pp. 559-61. Whether, in consequence, population would grow, he did not say.

²¹⁹ *Ibid.*, pp. 558-59. In his *Vie de . . . Turgot* (pp. 10-12), in his discussion of Turgot's theory of progress, Condorcet expressed a similar opinion.

²²⁰ *Outlines*, pp. 1-4, 235-36, 316.

²²¹ *Ibid.*, pp. 317, 320-21, 324, 327, 333-37. Existing laws, he suggests, check the trend of fortunes toward equality. A rounded system of social insurance would diminish inequality, eliminate much misery, and generally diffuse security and well-being (*ibid.*, pp. 329, 331-33). He did not anticipate the disappearance of all inequality, but only of such inequality as checked progress. He continued to defend

would continually improve, as would his moral principles and his scientific knowledge and instruments.²²²

Condorcet emphasized the importance of man's education and his cultural inheritance²²³ and stressed the fact that all factors contributing to, and insuring progress in, "the improvement of the human species . . . must, from their very nature, exercise an influence always active and acquire an extent ever increasing."²²⁴ The consequences of this improvement, in so far as population theory is concerned, would be twofold: (1) an increase in per capita output in agriculture and industry and hence an increase in individual prosperity;²²⁵ (2) a steady prolongation of human life.²²⁶

Having presented this roseate account of the future, Condorcet questioned whether population pressure, even granting that its appearance would long be delayed, might develop and destroy the fruits of progress.²²⁷ His reply was in the negative. Even

competitive pricing and the doctrine that the individual's efforts to promote his interests conduced to the "good of the whole" (*ibid.*, p. 236; *Tableau*, p. 367).

²²² *Outlines*, pp. 319-40, 360-65.

²²³ "The real improvement of our faculties, moral, intellectual and physical, which may be the result either of the improvement of the instruments which increase the power and direct the exercise of those faculties, or of the *improvements of our natural organization*" (*Outlines*, p. 319). My italics. The italicized words do not support Schapiro's statement (*op. cit.*, p. 263) that "nowhere does Condorcet imply that progress means an increase in the capacity of the human mind." Condorcet states also (*Outlines*, p. 340) that even though the extent of man's intellect remains the same, technology will improve. Elsewhere (*ibid.*, pp. 370-71) Condorcet suggests that man's physical and intellectual faculties are inherited, as are the improvements produced in these faculties by education; that, as a result, man's "organization" will be improved. Whether he had in mind only cultural inheritance, or also a kind of Lamarckianism, is not clear. For Condorcet's elaborate treatment of the organization, role, and importance of popular education, see Schapiro, *op. cit.*, chap. xi. J. B. Robinet, a contemporary of Condorcet, supposed that man would progress physically and mentally (Lovejoy, *op. cit.*, p. 282). ²²⁴ *Outlines*, p. 366.

²²⁵ *Ibid.*, pp. 319, 340-44. He even conceived of the synthetic or artificial production of vegetable and animal substances (*Tableau*, p. 453).

²²⁶ Elimination of poverty, improvement in diet, progress in "the sanative art," abolition of contagious diseases, and elimination of much occupational and preventable disease will prolong life. It is not absurd "to suppose that the period must one day arrive when death will be nothing more than the effect either of extraordinary accidents, or of the flow and gradual decay of the vital powers" (*Outlines*, pp. 367-70).

²²⁷ "Whether the number of inhabitants in the universe at length exceeding the means of existence, there will not result a continual decay of happiness and population, and a progress towards barbarism, or at least a sort of oscillation between good and evil?" (*Outlines*, p. 345). This statement may have been inspired by Wallace's work (see below); however, there is no direct evidence that Condorcet was familiar with Wallace's demographically-founded pessimism.

assuming limits to improvements in the arts and sciences, man's prejudices will have disappeared and his moral outlook will have advanced sufficiently to cause him to curtail his propagation and preserve the fruits of progress.

Men will then know, that the duties they may be under relative to propagation will consist not in the question of giving *existence* to a greater number of beings, but *happiness*; will have for their object, the general welfare of the human species; of the society in which they live; of the family to which they are attached; and not the puerile idea of encumbering the earth with useless and wretched mortals. Accordingly, there might then be a limit to the possible mass of provision, and of consequence to the greatest possible population, without that premature destruction, so contrary to nature and to social prosperity, of a portion of the beings who may have received life, being the result of those limits.²²⁸

Condorcet's argument boils down to this: The forces making for progress will long work cumulatively. Should they become spent, however, and should numbers begin to catch up with resources, man, now free of prejudice, will no longer bring children into existence if such action entails injury to the children in question or to the welfare of people already living.²²⁹

²²⁸ *Ibid.*, pp. 346-47. Translator's italics.

²²⁹ Condorcet did not describe any specific method of controlling numbers. To Malthus' criticism that Condorcet's proposal would destroy virtue and purity of manners, the latter would have replied that even though some sexual looseness resulted, the greater evil, uncontrolled propagation, would be prevented. Condorcet considered sexual looseness an evil of little import (Schapiro, *op. cit.*, pp. 193-94). A. Brun (*Le triomphe du Nouveau Monde*, Paris, 1785, I, 51-52) contemplated great progress, but apparently anticipated no difficulty from population growth. Condorcet's optimism differed from that of the exponents of plenitude who, believing in the "blessedness of sheer multitude" and in the excellence of diversity in the world of living things, condoned the evils which proceeded from the resulting struggle for existence (Lovejoy, *op. cit.*, pp. 218-20, 360-61). In a work (purportedly translated from the French) in which this doctrine is elaborated (*A Philosophical Survey of the Animal Creation, wherein The general Devastation and Carnage that reign among the different Classes of Animals are considered in a new Point of View; and the vast Increase of Life and Enjoyment derived to the Whole from this Institution of Nature is clearly demonstrated*, Dublin, 1770), many obstacles to population growth are enumerated (e.g., unhealthful employments, war, pestilence, disease, luxury, sensuality, improper child feeding). This work, asserted M. T. Sadler (*The Law of Population*, London, 1830, I, 48-49), contained Malthus' theory.

THE NONPHYSIOCRATIC ECONOMISTS

MANY WRITERS rejected the leading tenets of the physiocrats in whole or in part. The criticisms of certain of the philosophes and of writers on luxury have already been noted. In the next chapter the views of the extreme antiphiysiocrats will be examined. The present chapter will be devoted chiefly to the doctrines of non-physiocratic and somewhat antiphiysiocratic writers, most of them liberal economists. For the sake of convenience, critics of the physiocrats (e.g., Messance, Forbonnais), partial disciples of Quesnay (e.g., Turgot, Auxiron), and writers less easy to classify (e.g., Isnard, Herrenschand, Rochefoucauld-Liancourt) are treated in this chapter.

I

Several of the opinions of Quesnay and Mirabeau were criticized by M. Messance, secretary to the intendant of Auvergne and later collector of revenue at Saint-Étienne.¹⁷ In his first work, undertaken specifically to test the validity of Mirabeau's claim that the French population had decreased and was not increasing, Messance showed that the absolute number of births and therefore the total population had increased in the *généralités* studied; and that the ratio of births to marriages had increased. He thus convincingly supported the opinion of Voltaire and others that the population of France had increased.² In his later work, however, he indicated that while births still exceeded deaths, the excess was little more than sufficient to counterbalance exceptional losses caused by periodic wars and pestilences.³

¹ For a complete account of Messance's life and work see my "Messance: Founder of French Demography," *Human Biology*, XII (1940), 77-94. Messance published two main works: *Recherches sur la population des généralités d'Auvergne, de Lyon, de Rouen, et de quelques provinces et villes du royaume, avec des réflexions sur la valeur de bled tant en France qu'en Angleterre depuis 1674 jusqu'en 1764* (Paris, 1766); *Nouvelles recherches sur la population de la France avec des remarques importants sur divers objets d'administration* (Lyon, 1788). The latter was in part a friendly criticism of Necker's *De l'administration des finances de la France*.

² *Recherches*, Preface, and pp. 21-22, 56-58, 99-101, 144 ff.; also *Nouvelles recherches*, pp. 1-6, 65-69, 77-79.

³ *Nouvelles recherches*, pp. 6-9. All the evidence showed, he added, that France was more densely populated in the eighteenth century than earlier (*ibid.*, pp. 63-64).

Although Messance enumerated certain checks to population growth, he believed in general that population growth was beyond legislative control, and that the desire of men to marry and propagate was so great that population naturally tended to grow so long as subsistence was obtainable. Celibacy, ecclesiastical and lay, libertinage, debauchery, and "depravation of the *mœurs*" could slow down but not prevent population growth, when subsistence was obtainable.⁴ Other alleged checks were relatively unimportant⁵ or without effect. In general, man's urge to marry and propagate was so strong⁶ that the number of inhabitants was governed predominantly by the degree of perfection in agriculture and industry, by increase or decrease in production.⁷ Population tended to grow rapidly in newly settled areas and slowly in old countries where employment and subsistence were not easily procurable; it ceased to grow when subsistence was no longer susceptible of increase, deaths then balancing births in the long run.⁸

Messance did not look upon luxury and urbanization as checks to population growth. Both luxury and urbanization, in his opinion, were favorable to population growth; for the demand for agricultural products and labor expanded as luxury and urbanization developed and spread.⁹ To the argument that the

⁴ *Recherches*, pp. 21-22, 105-06, 143; *Nouvelles recherches*, pp. 22-23, 27. In *Recherches* (pp. 21-22, 105, 143) he indicated that celibacy had diminished and that libertinage had not increased. In *Nouvelles recherches* (p. 27) he referred to "the calculation which impels man to celibacy" (i.e., lay celibacy) or "to want only one or two children," and to "the false grandeur which induces man to have a great number of domestics, a great number of guests at his table, in place of finding himself surrounded by his children; and the greatest depravation, that which crowns everything, to destroy in the act of sowing." The *mœurs* were worse in 1700 than in 1760, he believed (*ibid.*, pp. 22-23).

⁵ He mentioned war, bad harvests and dearth, unemployment, and epidemics (*Nouvelles recherches*, pp. 24-25). See below for his comments on luxury, misery, and urbanization.

⁶ In *Recherches* (p. 143) he wrote: "Marriage depends upon the will of men and their character; and their desire in this matter is never able to be subordinated to the will of the Legislator; fecundity of marriages depends upon causes absolutely independent of the wish even of those who alone can contribute to it, and is for this reason above the laws of men."

⁷ *Nouvelles recherches*, pp. 6-7.

⁸ *Ibid.*, pp. 6, 12.

⁹ *Ibid.*, pp. 30-36, 59, 85, 87. He noted, however, that rural natural increase was the ultimate source of a nation's population growth and that the rural population supplied the nation with soldiers and materials (*ibid.*, pp. 28-29, 57-60). He did not seek to reconcile the two contradictory views that urbanization was favorable to population

multiplication of horses deprived men of subsistence, he replied: (1) that the use of horses in agriculture was labor-saving and economical; (2) that the manure produced by horses augmented the fertility of the soil and thus probably increased the yield of some lands by an amount sufficient to counterbalance the use of other lands to produce feed for horses.¹⁰ He did not look upon misery as an important check, inasmuch as the rural population, which comprised the bulk of the nation, was inured to misery.¹¹

Messance looked with disfavor upon conditions that tended to retard population growth;¹² yet he advocated no propopulationist legislation, presumably because he believed it futile. Colbert's measures had not diminished celibacy or augmented natality.¹³ Reproduction tended at least to balance mortality. "The destruction of the human species is proportioned to the means that it has of multiplying itself; if it were otherwise, the population would perish or multiply too much."¹⁴ At most, governments could favor population growth by preserving the purity of the *mœurs* and the health of the people, permitting all persons of marriageable age to marry, and assuring to each "liberty of person" and security of property.¹⁵

In his treatment of the coal industry, however, Messance was a conservationist if not a populationist. France would retain mastery of Europe so long as she remained predominant in the munitions and heavy industries. Since these were founded upon the coal supply, it was necessary to conserve this fuel resource by requiring the population to use wood in place of coal whenever possible.¹⁶ Were it mandatory to use wood whenever possible,

growth and that all classes were recruited from the rural population. Perhaps he would have argued that urbanization, though not conducive to urban natural increase, stimulated rural natural increase.

¹⁰ *Ibid.*, pp. 85-86. Cp. Condillac and Bielfeld on use of manure.

¹¹ *Ibid.*, pp. 37-38. The obligation to serve in the militia affected too few to be an important check (*ibid.*, p. 62). While he indicated that the tax burden was not so unevenly distributed as some writers claimed (*ibid.*, pp. 89-92), he favored both the restriction and the better distribution of this burden (*ibid.*, pp. 28, 30-32, 39, 58-59, 93 ff.).

¹² *Nouvelles recherches*, pp. 2, 6, 26.

¹³ *Recherches*, pp. 143-45.

¹⁴ *Ibid.*, p. 106; also *Nouvelles recherches*, pp. 6-7, 12, 24-27.

¹⁵ *Nouvelles recherches*, p. 24.

¹⁶ Individual self-interest could not be wholly trusted in this matter.

"The Government must not calculate as an individual; it must not see an end to its duration; it must act as if it must exist as long as nature.

the market for wood would expand, trees would be planted, and the wood supply would eventually become adjusted to the increased demand. In the interim the government could stimulate wood production and limit its consumption sufficiently to enable the supply to increase in the long run.¹⁷

Messance's first work included a criticism of the physiocratic doctrine that freedom of trade in grain would elevate grain prices and therefore benefit the masses.¹⁸ Only experience would indicate whether the establishment of freedom of trade would push up the price of grain in France. Prices had not risen in other export industries in consequence of greater freedom of trade. Moreover, grain prices had behaved in the same way in England and France in 1674-1764, even though the commercial policies of the two countries had differed. Grain prices had fallen in France because of improvements in agriculture.¹⁹

High grain prices were not conducive to the improvement of the lot of the masses. Mortality was less, and health was better, in years of abundance and low prices.²⁰ Low grain prices did not necessarily mean low money wages, for the money wages of domestics and laborers had risen, despite the fall in grain prices. Moreover, when grain prices were low, workers did not have to spend all their earnings upon bread; they had money left for the purchase of clothing, furnishings, "small stuff," and other consumables. When, on the contrary, grain prices rose faster than money wages, workers had to spend nearly all their earnings upon bread, and the manufacturers of goods (other than bread) consumed by workers suffered a loss of sales. Then, too, since workers toiled hardest when there was a prospect of earning more

"Let the avid English carry to all nations the coal of the land which has been prodigal to them; in some centuries, they will no longer be our rivals in works of iron and steel.

"Let us be economical with a treasure which, once dissipated, can no longer be replaced.

"That People which will be the last to supply its forges, will necessarily be the master; for it alone will have the arms" (*ibid.*, p. 128).

¹⁷ *Ibid.*, pp. 127-28.

¹⁸ This section of *Recherches* seems to have been written by someone other than Messance; for in *Nouvelles recherches* (p. 3), in commenting upon Adam Smith's reference to these reflections on the relationship between wages and the price of grain, Messance wrote: "Je dois dire que ces réflexions ne sont à moi."

¹⁹ *Recherches*, pp. 280-82.

²⁰ *Ibid.*, pp. 291-92.

than bare subsistence—only the most indolent being activated by necessity—the laboring population experienced a decrease in incentive to work when an increase in grain prices caused a decline in real wages.²¹ It was not desirable, however, that grain prices be kept low by means of legislation. Commercial liberty was preferable to governmental regulation. Under the system of economic liberty the market for manufactures would expand, and costs of production and prices would fall as workers became more adroit, wasted less material, worked more effectively and efficiently, and developed and made use of new inventions; the wages of workers would rise and labor costs per unit of output would fall simultaneously.²² Presumably, real wages and the objective standard of living would rise as per-worker productivity increased.

In his later work Messance explained that the real wages of coal miners were low not because the “price of provisions” was low, but because coal miners are unskilled and “know not ambition, and . . . limit themselves to find in this work, bread, and the most coarse clothing.”²³ He developed no such theory of wages as appeared in his earlier work, nor did he express himself in favor of high wages.²⁴

II

F. V. de Forbonnais (1722-1800), inspector general of money, essentially a realist and a liberal mercantilist, not only anticipated the physiocrats but also criticized certain of their doctrines. In greater measure than Melon he espoused a qualified economic liberalism and dwelt upon the beneficent tendencies implicit in a competitive economy. He emphasized at least as much as Quesnay that the comfort of the masses was one end of economic organization. But he rejected the physiocratic theories of production, luxury, and money, and supported certain mercantilistic objectives and methods. He was in part a populationist.

In his first important work,²⁵ a defense of commerce, agri-

²¹ *Ibid.*, pp. 287-90.

²² *Ibid.*, pp. 282-83.

²³ *Nouvelles recherches*, p. 125.

²⁴ However, he looked with favor upon “the multiplication of men” and “the increase of their happiness” (*ibid.*, pp. 2, 26).

²⁵ *Elémens du commerce* (Leyden, 1754), hereinafter cited as *Eléments*. This work includes chapters on commerce, competition, insurance, and foreign exchange which also appeared in Diderot’s *Encyclopédie*.

culture, and competition, he writes as a populationist, despite his implied assumption of a natural order. Competition, he believed, tended to place each person in the type of employment most lucrative for him, and thus augmented the nation's wealth and commercial strength²⁶ and (by implication) population. Apparently, competition was to prevail within the nation, but not among nations; for in his treatment of "commerce"—i.e., merchandising, manufacturing, and exporting²⁷—Forbonnais inferred that the importation of foreign merchandise injured the wage-earning and manufacturing classes and the producers of raw materials, and depressed the level of economic activity.²⁸ "Commerce," especially exportation, elevated the actual level of employment and the nation's potential capacity to employ men, thus attracting immigrants, favoring natural increase, and increasing state power.²⁹

Forbonnais looked upon agriculture, almost as did the agrarians, as the real basis of both commerce and state power, for agriculture offered a more certain income than manufacturing and supplied soldiers, sailors, and personnel for other occupations.³⁰ Accordingly, he supported policies favorable to agriculture: permission to ship grain freely within and from France; exclusion of foreign provisions which competed with French products; and the development in France of manufactures which would utilize farm products.³¹

With the twofold qualification that the population should be happy,³² and that it should be employed as productively as possible,³³ Forbonnais favored as large a population for France

²⁶ *Ibid.*, I, chap. ii, esp. pp. 63, 92.

²⁷ *Ibid.*, I, 81-82.

²⁸ *Ibid.*, I, 48, 51-52. He expressed his indebtedness to English writers, mentioning in particular Childs and Hume.

²⁹ *Ibid.*, I, 45-47, 61-65, 98, 264-65; II, chap. xii, also p. 230. There is no inkling of Cantillon's view of trade.

³⁰ *Ibid.*, I, chap. iii, esp. pp. 102-06, also pp. 276, 297-98. Forbonnais discusses at length (chap. iii) the works of English writers on agriculture and certain agronomic principles, such as crop rotation and the use of fertilizers and grasses. His writings were not bellicose, emphasizing only defense (Silberner, *op. cit.*, pp. 146-49).

³¹ *Eléments*, I, 51, 55, 105, 131-35, 138, 142, 162, 247-48, 275; II, 202-03. He opposed the re-exportation of foreign provisions when such re-exportation was inimical to the sale abroad of domestically produced provisions (*ibid.*, I, 118-19).

³² "The object of Commerce in a state is to support in comfort by labor the greatest number of men" (*ibid.*, I, 46, also 63). A people is not happy when it lacks any of the "agrémens de la vie" (*ibid.*, I, 55).

³³ *Ibid.*, II, 259-60. He advocated workhouses for the unemployed and mendicants, and a reduction in the number of holidays (*ibid.*, I, 62; II, 260-61, 266).

as could be attained, stating that when its population was large, a state was wealthier and more self-sufficient, had a larger export surplus, and in consequence was strong.³⁴ For reasons already noted, he wanted a large proportion of the population to be rural, declaring that the rate of growth of the rural population constituted an index of the strength and soundness of the nation.³⁵ Accordingly, while he stipulated that legislators were not to interfere with the details of the private life of the citizen, he declared that they were bound to prevent by law actions conducing to depopulation or to the ruin of the state.³⁶

The population capacity of a state and a nation's rate of population growth were governed primarily by the availability of employment and subsistence. "Population depends upon the facility that citizens find in procuring through labor a comfortable subsistence, and upon their security."³⁷ Given such "facility," population would grow through immigration and natural increase. When such "facility" was lacking and when the price of labor did not suffice to procure subsistence, emigration and depopulation took place.³⁸ This "facility" tended to be greater when competition prevailed, when new inventions and labor-saving methods were employed,³⁹ when commerce and agriculture were flourishing, when new wants and employments were being developed, and when the balance of trade was favorable and adding to the "capital fund" of the state.⁴⁰

Among the important checks to population growth he included unemployment, deficiency of subsistence, laws and taxes

³⁴ *Ibid.*, I, 45-47; II, 259.

³⁵ *Ibid.*, I, 105.

³⁷ *Ibid.*, I, 61.

³⁶ *Ibid.*, II, 265.

³⁸ *Ibid.*, I, 61-62.

³⁹ The use of labor-saving machinery would not cause unemployment, particularly if it were introduced cautiously (*ibid.*, I, 63-65): its use was especially desirable in urban centers, for by cutting down the number of workers needed in cities, such machinery checked urbanward migration and rural depopulation (*ibid.*, I, 298-99). Urban occupations and domestic service were attracting too many rural inhabitants (*ibid.*, I, 276, 285, 298; II, 263-69). Forbonnais condemned as useless "purely literary" educational institutions (*ibid.*, II, 273-74).

⁴⁰ *Ibid.*, I, 61-65, 71-72, 101-03, 245, 264-65. "An advantageous balance . . . will augment our population, or conserve it, . . . will give to a great number of men the means of consuming abundantly the provisions . . . that the earth produces; & . . . finally by the augmentation of wages will augment the value of grain itself." See *ibid.*, I, 130; also II, 100-05, where he treats principally of the necessity of a sufficient supply of money.

which impeded production, and debauchery.⁴¹ Luxury retarded population growth insomuch as it caused men to prefer nonessentials to marriage;⁴² but at the same time it provided many with employment,⁴³ as did the discovery of new needs which made new occupations possible.⁴⁴ Poor parents, fearing the cost of educating children, tended not to have offspring when it was difficult to apprentice them.⁴⁵ When the middle class became numerous relative to the lower class, marriages tended to be fewer and celibacy more frequent.⁴⁶ At times, but not always, the movement of population from the mother country to the colonies tended to depeople the mother country; then the adoption of preventive measures was necessary.⁴⁷

Forbonnais said little of the determination of wages in *Eléments*. He virtually subscribed to a subsistence theory of wages, saying that the price of labor adjusted itself to the price of subsistence; yet he supposed that a favorable trade balance would benefit wage earners.

Two factors regulate wages in a state; first the price of subsistence, then the profit of the diverse occupations of the people through the successive augmentation of the mass of money that foreign commerce sends in.⁴⁸

The subsistence of workers being dear, their wages would be dear in the same proportion.⁴⁹

Presumably, he thought that wages became adjusted to grain prices through alterations in the number of workers, but he was not specific.⁵⁰ At times he supposed a fixed relation between the wage level and the grain price level;⁵¹ at other times he allowed some flexibility. Great cities were not suited to manufacturing

⁴¹ *Ibid.*, I, 102, 181-82; II, 242. The revocation of the Edict of Nantes had greatly depopulated France (I, 42).

⁴² *Ibid.*, II, 240-42. He defined "luxe" as living agreeably through the labor of others.

⁴³ *Ibid.*, II, 221, 230, 234-35.

⁴⁴ *Ibid.*, I, 102-03.

⁴⁵ *Ibid.*, I, 276.

⁴⁶ *Ibid.*, II, 268.

⁴⁷ *Ibid.*, I, 373-80. He advocated that the mother country transport all colonial commerce, using slaves if necessary to prevent wages from rising too much (*ibid.*, I, 373-74, 377); that nations place no man's land between colonies to avert war (*ibid.*, II, 16-17).

⁴⁸ *Ibid.*, I, 123; also II, 116.

⁴⁹ *Ibid.*, I, 124, also 131 and 126, where he noted that French wages were low because the price of grain was low.

⁵⁰ *Ibid.*, II, 116-17.

⁵¹ *Ibid.*, I, 124; II, 116.

because provisions cost more there, and urban workers demanded more superfluities.⁵² He attributed to England's favorable balance of trade the fact that both industrial wages and the price of grain were higher there than in France.⁵³ He did not inquire whether the subjective standard of living might rise, reduce the relative supply of labor, and push up wages.

Concerning wage policy he said little. Presumably, all classes were entitled to be happy. Moreover, an appropriate class balance must be preserved.

It is just & indispensable to establish equilibrium among the diverse classes & the diverse occupations of the people. Grain forms the greatest part of the product of the soil and the most necessary: therefore the cultivation of grain must procure to the cultivator a profit capable of maintaining him in his profession & of compensating him for his efforts.

It would appear most advantageous then to maintain the price of grain continually around the point where the cultivator is encouraged by his profit, while the artisan is not forced to augment his wage in order to nourish himself or to procure for himself a better subsistence. . . . The general police of the state may bring this about.⁵⁴

In his financial history of France⁵⁵ Forbonnais said that agriculture and commerce constituted the sole "sources of the wealth of the subjects and the sovereign,"⁵⁶ and that the growth of population depended upon progress in agriculture and industry.⁵⁷ While he did not essentially modify his earlier views on money, he did say that the quantity of money in a country did not in itself comprise the "principle of agriculture, of industry, & of population."⁵⁸ Money acquired easily and without industry, begot ostentation.⁵⁹ Nations possessing gold and silver mines tended to suffer depopulation.⁶⁰ When, on the contrary, men had the opportunity to earn money and acquire comfort through labor, economic life was activated; for men were motivated to work by

⁵² *Ibid.*, I, 289-90.

⁵³ *Ibid.*, I, 126-27; see also I, 130, 290-91.

⁵⁴ *Ibid.*, I, 130-31. In this volume the term "police" is always used in the eighteenth-century sense of internal regulations by the government ("Police," R. H. I. Palgrave, *Dictionary of Political Economy*, III, 124-25).

⁵⁵ *Recherches et considérations sur les finances de France* (6 vols.; Liege, 1758).

⁵⁶ *Ibid.*, III, 125.

⁵⁷ *Ibid.*, VI, 252.

⁵⁸ *Ibid.*, IV, 174.

⁵⁹ *Ibid.*, VI, 255.

⁶⁰ *Ibid.*, VI, 252.

the desire for goods and the urge to emulate, and they put forth the greatest amount of effort when these desires could be gratified.⁶¹

Forbonnais defended the use of legislation and tax arrangements to favor population growth.⁶² In general, he approved Colbert's efforts to suppress religious and lay celibacy and to stimulate population growth through tax exemption and pensions; but he observed that Colbert should have made a greater reduction in the *taille* and should have allowed pensions to fathers (other than cultivators) with nine children instead of ten or twelve.⁶³ As in his earlier work, Forbonnais implied that the population must be kept employed to be useful, and expressed alarm at rural depopulation.⁶⁴ While he was careful to say that manufacturing must not be discriminated against, he expressed disapproval of measures which advantaged either manufacturing or the colonies at the expense of domestic agriculture; if agriculture and commerce were treated equally, and if conditions were such that one could more easily obtain subsistence in rural than in urban centers, manufacturing would flourish, state revenues would grow, marriages would be more fruitful, and rural depopulation would be averted. He advocated removal of restrictions upon grain exports, a more equitable distribution of the taxes incident upon the rural population, and as a means of checking needless urbanward migration, a tax upon urban lackeys.⁶⁵ To stamp out mendicancy he proposed that the idle be placed in workhouses or sent to the mines, the galleys, and the colonies.⁶⁶

Although Forbonnais did not discuss laws of returns in *Eléments* or *Recherches*, he seems to have recognized the operation of diminishing returns at the extensive margin. For he said

⁶¹ Forbonnais was replying to those writers who maintained that comfort made the common man rebellious and lazy (*ibid.*, I, 109-11).

⁶² *Ibid.*, II, 351 ff.

⁶³ *Ibid.*, II, 352-60. He refers to later minor propopulationist measures in V, 253-55.

⁶⁴ He noted the threat of depopulation, implying that family size was limited voluntarily, when he said that one needed but to consult the clergy "on the diminution of families [and] one will evidently perceive whence comes the misfortune which menaces us" (*ibid.*, II, 172).

⁶⁵ *Ibid.*, II, 169-73.

⁶⁶ *Ibid.*, I, 255-57; II, 360. He criticized the French hospital system, saying that hospitals should be reserved for the sick and the aged, and that foundlings aged ten or more years should earn their keep (*ibid.*, I, 255-57).

that the low level at which grain prices were held in consequence of Colbert's legislation of 1664 caused high-cost grain production to be discontinued. "Cultivation diminished, in general, principally on mediocre or adverse soils, which required greater outlays. Marshes remained marshes, uncultivated lands continued to be useless, [cultivators] seeing with the aid of a very simple calculation that the worth of their possible productions would not equal the known expense."⁶⁷

In his chief theoretical work, Forbonnais' reasoning reflects the influence of Quesnay, even though this work was directed in part against the "metaphysical obscurity" of Quesnay's system.⁶⁸ Forbonnais continued to look upon political and economic power as a function of population size and as a principal objective of state policy; but he advocated no specific propopulationist program, presumably because he now believed population growth to be governed by the laws of the "natural order"; he merely implied in several places that some policies were not favorable to population growth.

Forbonnais now stated explicitly that population naturally tended to grow to the limit of production and in the same proportion as production, especially that of provisions; that population tended to increase so long as uncultivated land remained available. "There is a limited relation [*rapport*] between the quantity of territorial productions which include fishing, & the population."⁶⁹ "Men will never be lacking where subsistence will be assured; announce a wage & you will create workers."⁷⁰ Despite his belief in the natural tendency of population to grow, Forbonnais did not infer that population and production would inevitably grow until the attainable limits had been reached; for unless workers could sell their services freely, they tended to emigrate or failed to marry and to multiply as rapidly as possible.

⁶⁷ *Recherches*, II, 165.

⁶⁸ *Principes et observations oeconomiques* (Amsterdam, 1767). Forbonnais, who would be classed today as an "institutionalist," condemned loose generalizing and emphasized the need for observation (*ibid.*, I, Introduction and notes, pp. 48-49, 56, 311-16). Unless otherwise indicated references are to this edition.

⁶⁹ *Ibid.*, I, 39. He wrote that "there is a rigorous relation between population & production" (*ibid.*, I, 47).

⁷⁰ *Ibid.*, I, 45. Elsewhere (II, 169) he repeated his earlier view that there was a close relationship between money wages and the price of grain.

"Abundance of work multiplies marriages, renders them more fecund," and attracts the idle poor from countries and areas of unemployment.⁷¹ Work tended to be abundant only when the population was so distributed between agricultural and nonagricultural pursuits as to make production and employment in each field profitable and worthy of expansion. In the absence of this balance, population would not grow to the limits of a nation's territory, and the state would not be as powerful as it might naturally be.⁷²

Forbonnais recognized, although not so clearly as Cantillon, that whether or not foreign trade added to the population capacity of a state turned on whether or not this trade brought in a balance of provisions. He indicated, moreover, that when a state was able to export provisions, it was *ipso facto* underpopulated.⁷³

The general object of a state is evidently to array itself in all the means of power of which it is susceptible; that is to say, to arrive at the most correct relation between its territorial production and the extent of its domain, and between its territorial production and its active population: for, men being essentially the means of power, and this means being able to be put into effect only through wealth or revenue, public prosperity consists on the one hand in the greatest possible net product, on the other in supporting with this revenue the greatest possible number of men in action, either for the accommodation of the wealthy, or for the protection of society. Whence it results that the more territorial provisions a nation has to export abroad, the more its active population finds itself removed from the possible and perfect relation with its revenue: unless these provisions go out in exchange for other necessities refused by its own territory.⁷⁴

If the major part of this [domestic] consumption is made at home by workers who exchange their products for foreign provisions which their country lacks; will not the active population be more numerous than if a direct exchange were made between territorial production & foreign provisions? Is this excess population an evil?⁷⁵

⁷¹ *Ibid.*, I, 136, 142-43, and 63.

⁷² *Ibid.*, I, 37-38.

⁷³ Forbonnais did not refer to Cantillon's work, but he must have known Cantillon's reasoning from Mirabeau's *L'ami des hommes*. Forbonnais did refer to the physiocrats, to Bodin, Melon, Herbert, and to Ustariz, whose *Teórica y práctica de comercio* he translated. In the preface to this translation he observed that the strength of a state depends on the happiness of its people.

⁷⁴ *Principes*, I, 56.

⁷⁵ *Ibid.*, I, 205.

Forbonnais now approved of international commerce, not only because it might bring in a net balance of provisions, but also because it made possible a variation in consumption, a better national and international balance among occupations, and an influx of precious metals, and thus added to the happiness of the population and to the capacity of the state to support population. Foreign commerce made available foreign goods which could not otherwise be enjoyed; it enabled a country to "follow the view of nature," use its resources in the most effective manner, and exchange its surpluses of various goods for things it could produce with difficulty or not at all.⁷⁶ Foreign commerce made possible a greater volume of employment and a larger population than could be supported, were the state self-contained; for it permitted persons to engage in nonagricultural employments whose products could be exchanged for foreign provisions.⁷⁷ Forbonnais did not believe it to be to a country's general advantage to export primary provisions; but he did admit that such exportation might be favorable temporarily until an adequate internal market for agricultural products had been developed,⁷⁸ and even permanently if the money received in exchange for the French provisions served to facilitate both the employment of idle persons and the creation of other types of goods and provisions.⁷⁹ An influx of money, in consequence of a favorable balance of trade, Forbonnais reasoned, would render industry more profitable and cause entrepreneurs to expand employment and production. "The increase of pecuniary wealth . . . tends continually to excite production and population."⁸⁰

⁷⁶ *Ibid.*, I, 57-58, 64; II, 138.

⁷⁷ *Ibid.*, I, 63-64, 204-05; II, 126-27. In one place (I, 38) he seems to imply that such part of the population as is dependent upon foreign food supplies is in a precarious position.

⁷⁸ *Principes*, in *Mélanges d'économie politique*, I, ed. E. Daire and G. de Molinari, hereinafter called Daire ed. (Paris, 1847), pp. 198, 229; also *Principes*, I, 56 ff.

⁷⁹ *Ibid.*, I, 139-40, 204, and 64. Prohibiting the exportation of primary necessities would not establish the proper relation between numbers and productive possibilities, whether or not a country had an export surplus; on the contrary, such prohibition might diminish profit, and thus depress production in general and diminish population. Freedom to sell abroad in all circumstances was necessary in order that an "equilibrium of profit" be established among all types of production (*ibid.*, I, 56-57).

⁸⁰ *Ibid.*, I, 136, 139-40; II, 138-39, 144. Money had this effect only if earned, and not if it came from mines, as in Spain (*ibid.*). Forbonnais thus differed from Quesnay, who considered money only a means of exchange (A. Dubois, *R. d. e. p.*, XVIII, 1904, 213-16).

Forbonnais rejected the physiocratic theory of luxury, saying that prejudice led the physiocrats to classify too many things as decorative luxuries, and to misinterpret the consequences of luxurious consumption. The attainability of luxuries tended to augment production, for men were spurred to activity by the prospect of enjoying luxuries and emulating their fellowmen. Luxurious consumption provided employment and support for the nonagricultural population when agriculture yielded more provisions than the agricultural population required. Moreover, within a self-contained country decorative luxury resolved itself into a demand for agricultural products and thus stimulated agriculture.⁸¹ Forbonnais approved of luxurious consumption, however, only when it originated predominantly in the demand of agriculturalists with an agricultural superfluity to spend; not when it was supported by borrowing, by an unfavorable balance of trade, or by income derived from burdensome taxes.⁸² He approved taxes which served to shunt men and horses from employments where their services were socially less useful to employments where they were more useful; but he opposed sumptuary legislation, because it upset occupational balance, and did not improve the use of land.⁸³

In his treatment of income and consumption Forbonnais followed Quesnay and Cantillon in part. The primary source of income was in extractive industry, especially agriculture, the net yield of which supported those engaged in nonextractive employments. "Territorial production is the unique source . . . of all revenue; and the superfluity, above physical subsistence, is the primary cause of products, useful, serviceable, or pleasing, as well as useless. . . . It is the superfluity of the proprietors of land which sets men in action, which renders the population wealthy."⁸⁴ The level of income, and presumably the population

⁸¹ This reply was commonly made to the physiocratic contention that *luxe de subsistance* provided a very much larger demand for the products of agriculture than did *luxe de décoration*. In their rejoinders Quesnay, Mirabeau, and Baudeau sought to show that at best only a small part of the expenditure for *luxe de décoration* resolved itself into a demand for agricultural products. Moreover, when the luxury object embodied foreign materials, it was the foreign *productive* class that benefited (Dubois' Introduction to Baudeau, *Principes de la science morale et politique*, pp. vii-viii, x-xi, xviii; also pp. 15-19).

⁸² *Principes*, I, 236-38, 245-52; (Daire ed.), p. 206.

⁸³ *Principes*, I, 242, 251.

⁸⁴ Daire ed., pp. 221, 180-82. Agriculture constituted a more certain basis of wealth than manufacturing, Forbonnais believed, as did the agrarian writers (*Principes*, I, 205).

capacity of a country, were conditioned by the habits of consumption of the landed proprietors.

The fantasy and caprice of the proprietor of land [give] birth to the productions of 3rd, 4th, and 5th orders. . . . Commodities of the 3rd, 4th, and 5th orders are appreciated by the wealthy, . . . by those who are proprietors of a great superfluity of provisions. The greater the degrees of inequality among citizens in this excess, the more fantasy exerts itself, and the less there is of order and proportion in the remuneration of the work which supplies these fantasies. It is in part, says Bodin, the pleasure of the *grands seigneurs*, which makes things dear.⁸⁵

When landownership was highly concentrated, the wealthy tended to assemble in cities and expend their income upon non-necessities. Share-cultivators did the farming, and the owners, being wealthy, were not under pressure to improve their lands and accumulate property for their children. When, on the contrary, the land was owned by many small proprietors, each farmed his land and endeavored to extend and improve his holding, so that he might leave something to his children. Small-scale ownership, therefore, was much more favorable to agriculture and its improvement, to the extension of cultivation, and therefore to population growth. Moreover, the "natural" inclinations of the small-scale proprietors constituted the only check to the consumption and other unfavorable tendencies associated with large-scale ownership.⁸⁶

Forbonnais rejected the physiocratic interpretation of rural depopulation. He opposed both measures which penalized urban inhabitants and thus checked urbanward migration,⁸⁷ and measures which discriminated against agriculture; with respect to the latter he said that any governmental action (e.g., inequitable dis-

⁸⁵ Daire ed., pp. 182, 187, and 180-82. Food and necessities constituted goods of the first two orders; nonnecessities, goods of higher order.

⁸⁶ *Principes*, I, 37-45, 64, 87. It was futile to anticipate benefits from the return of large-scale proprietors to living upon their estates, if they but intended to spend their income upon "celibate" valets and useless horses and dogs rather than upon industrious families and the improvement of land (*ibid.*, I, 232). Forbonnais advocated granting cultivating proprietors exemptions from taxes and from militia service on part of their children (*ibid.*, II, 87-91). Forbonnais did not favor real small-scale cultivation, and condemned the inefficient methods of cultivation used by many small-scale farmers (*ibid.*, II, 61-65).

⁸⁷ Such measures would check both rural and urban population growth, he said (*ibid.*, I, 44-45).

tribution of the *taille*) "which will cause men to be more happy in cities, will oppose itself to . . . the increase of territorial production & of population."⁸⁸ Mirabeau and Quesnay were inconsistent, he said, in charging that agriculture occupied too many hands and at the same time asserting that rural depopulation was injuring agriculture in France. The significance of a decline in the rural population depended upon the circumstances surrounding such decline. When improvements in agriculture released workers for nonagricultural employments, a decline in the number of agricultural workers was desirable. When agriculture was depressed, or when the displaced agricultural workers were required to exchange their labor for provisions produced abroad, rural depopulation signified that agricultural production and employment were less than they ought to be. To the charge that favoritism of manufacturing and the colonies had injured French agriculture and caused rural depopulation, Forbonnais replied that developments in industry and manufacturing had provided a domestic market for the surplus products of agriculture, that agriculture was most prosperous in provinces with manufacturing, and that cultivation had increased since the opening of the colonies.⁸⁹

Forbonnais admitted the possibility of general overpopulation and occupational congestion, but denied the physiocratic assertions that France was overpopulated and that her population was not growing.⁹⁰ A country was definitely overpopulated when, as in China, the food supply was sufficient only in good years, and in bad years many had to emigrate or perish.⁹¹ It was self-evident to say, as had Quesnay, "that a poor population is not as extended a resource as a rich population; that only revenue is able to render a population wealthy; & that it is necessary to aug-

⁸⁸ *Ibid.*, I, 43-44. The *taille* diverted capital from agriculture (*ibid.*, I, 264). On the *taille* see H. Roberts, *Boisguilbert*, pp. 106 ff.

⁸⁹ *Principes*, I, 47-48, 141-42, 206-07, 268; II, 115-17, 122-23. With respect to the development of colonies and navigation, Forbonnais remained a mercantilist (*ibid.*, I, 75; Daire ed., pp. 200 ff.).

⁹⁰ He estimated the French population at nineteen to twenty million, and the national average level of consumption, which varied widely from province to province, as sufficient for life. Reducing the population by four million would not bring prosperity and wealth to the remainder (*Principes*, I, 197-98).

⁹¹ *Ibid.*, I, 37-38. Forbonnais urged that either private individuals or the government set up food reserves in good years for use in bad years (*ibid.*, I, 39).

ment revenues."⁹² Countries with sufficient land to nourish the population and supply provisions of a second order (e.g., olives, grapes) were most congenial to population growth.⁹³

Competition operated to preserve a balance between agricultural and nonagricultural pursuits and among professions and occupations. There must be enough nonagricultural workers within or outside the state to create a fund of goods and services sufficient to provide a market for all agricultural products which the farming population produced in excess of their own needs. When nonagricultural production was insufficient relative to agricultural production, and, in consequence, the landed proprietors were unable to obtain many nonagricultural commodities, agriculture was relatively crowded and without incentive to expand, and it was desirable to reduce the relative number engaged in agriculture. Competition tended to bring about a "natural" and necessary readjustment and balance.⁹⁴

Although Forbonnais supposed that competition tended to preserve the proper balance between agricultural and nonagricultural products, and that this balance was influenced by the comparative utility, unit cost, and supply:demand conditions, he did not evolve a satisfactory explanation of what determined the exchange ratio between agricultural and nonagricultural commodities, or between one nonagricultural commodity and another. Consequently, he developed neither a theory of distribution nor a theory of wages.⁹⁵ He was content to remark that most agricultural workers and therefore most workers received only a subsistence wage,⁹⁶ and that those who received more than subsistence obtained this excess because of the comparative scarcity of their

⁹² *Ibid.*, I, 284-85. A population to be productive and a source of wealth needed to be "active": each individual who produced a superfluity—an excess above personal and necessary consumption—needed to be able easily to dispose of this superfluity to a consumer desiring the commodity in question (Daire ed., p. 176).

⁹³ *Principes* (1767), II, 126-27. He favored taxing the poor only if the rich could not supply sufficient revenue (I, 240), yet said (I, 198) that a person with a smaller income was not necessarily less happy than one with a larger income.

⁹⁴ Daire ed., p. 198, also pp. 183-84.

⁹⁵ *Ibid.*, pp. 184-87.

⁹⁶ Two thirds to three fourths of the population were engaged in agriculture, Forbonnais estimated (*ibid.*, p. 199). Unlike the physiocrats, he considered labor in non-agricultural pursuits capable of producing a "net product," but one smaller than could be obtained in agriculture (*ibid.*, p. 191; 1767 ed., I, 174-77).

services. He did not specify clearly whether by subsistence for a worker, he meant subsistence for an individual, or for an average family of replacement size, or for a family large enough to permit population growth. Nor did he anticipate a rising subjective standard of living and therefore a rising real wage level.

The level of money wages in agriculture, as in other pursuits, was conditioned by the relative amount of money in circulation, whereas real wages in agriculture were conditioned primarily by the subsistence needs of the agricultural population. The demand of landed proprietors for agricultural labor was so conditioned by their gross money income that a diminution in the latter made necessary either a reduction of money wages or a diminution in the number employed. Landed proprietors not only sought to obtain labor at a "low price," but succeeded in doing so.⁹⁷ The wages of "the common and most necessary labor" in agriculture were "always limited to subsistence" and could not be further reduced. The wages of most agricultural laborers "are not susceptible of retrenchment because they permit no superfluity; and workers whose wage allows a superfluity are determined not to dispense voluntarily with commodities to which they have become so much habituated, as for them to be equivalent to a necessity."⁹⁸ Although he did not describe the mechanism of adjustment which held agricultural wages to this level, it is evident that he believed rural natural increase sufficient to keep up the supply of labor, given subsistence, and mortality and emigration adequate to reduce the supply of rural labor when wages fell below the subsistence level.⁹⁹

Whether or not Forbonnais believed that wages in nonagricultural occupations tended to exceed subsistence is not clear. He did say that money wages move with grain prices;¹⁰⁰ and that at times some workers received wages in excess of subsistence,¹⁰¹ presumably because their services were relatively scarce. At the same time he believed that professional earnings tended to remain equal, whatever their relation to subsistence needs.

⁹⁷ The complaint of rural depopulation was motivated by the desire of landed proprietors for an abundance of labor at a low price (*Principes*, I, 277).

⁹⁸ *Ibid.*, II, 169; (Daire ed.), pp. 209-10, 223-26.

⁹⁹ *Principes*, I, 46-48.

¹⁰⁰ *Principes*, II, 169.

¹⁰¹ *Ibid.* (Daire ed.), pp. 183-86, 224.

[Professions] naturally adjust themselves to the level of their need, for no one can work without profit. That could happen, nevertheless, if there were more men than necessary in some one of the professions, and this excess would be corrected by shifting to professions that would lack men, it being seen that wages had risen there.¹⁰²

III

Turgot (1727-1781), intendant at Limoges and for a time (1774-1776) controller-general, treated population problems in connection with his analyses of wage formation. An advocate of economic liberalism, Turgot believed that if artificial restrictions upon competition were removed, the economic condition of the working masses and of the nation as a whole would improve more than under any alternative system.¹⁰³

Turgot's wage theory was shaped in large measure by his acceptance of the proposition that population growth is governed primarily by the supply of subsistence. For, although he developed a marginal productivity theory with respect to the application of "advances" to land, he found in the conditions governing the long-run supply of labor the main ultimate determinants of the wage level. Wages, he concluded, while subject to the varying influences of supply and demand, were set primarily by the worker's requirements for "livelihood."

The mere Workman, who has only his arms and his industry, has nothing except in so far as he succeeds in selling his toil to others. He sells it more or less dear; but this price, more or less high as it may be, does not depend upon himself alone: it results from the agreement which he makes with him who pays [for] his labour. The latter pays him as little as he can; as he has the choice among a great number of Workmen, he prefers the one who works cheapest. The Workmen are therefore obliged to lower the price, in competition with one another. In every kind of work it cannot fail to happen, and as a matter of fact it does happen, that the wages of the workman are limited to what is necessary to procure him his subsistence.¹⁰⁴

¹⁰² *Principes*, I, 37-38. He admitted that "mendicity, the greatest of evils" could burden "all professions with the support of these supernumeraries" (*ibid.*).

¹⁰³ H. Séc, *L'évolution*, pp. 224-47. Turgot was influenced in some measure by Montesquieu, Hume, Quesnay, Gournay, Cantillon, Voltaire, and J. Tucker. On Turgot's earlier views see G. Schelle, "Les premiers travaux économiques de Turgot d'après ses manuscrits inédits," *R.H.S.*, IV (1911), 1-16.

¹⁰⁴ *Reflections on the Formation and the Distribution of Riches* (W. J. Ashley ed.,

Turgot here seems merely to have accepted the prevalent subsistence theory of wages, for, as Cannan indicates, Turgot's purpose in this portion of his *Reflections* was to show that agricultural workers could produce more than their subsistence.¹⁰⁵

Cultivators of land, as distinguished from owners and proprietors, fared no better than the laborers; they received "as small a part of the produce" as was necessary to secure their services. "In a word, the Cultivator and the Artisan receive, neither of them, more than the recompense of their labour."¹⁰⁶ Turgot noted that, because of temporary variation from one occupation to another in the ratio of the supply of labor to the demand for it, wages at times were higher in some occupations than in others; but he believed that such differences tended to disappear under conditions of competition.¹⁰⁷ It is almost inferable that Turgot believed that under equilibrium conditions the members of each occupational class would tend to receive little, if any, more than enough money to purchase the ordinary means of existence.¹⁰⁸ He indicated that only the landowners received, in consequence of their title to the net product of the land, an income that might include "a considerable superfluity."¹⁰⁹

New York, 1898), p. 8. This work, written in 1766, was first published in 1770 in *Ephémérides du Citoyen*.

¹⁰⁵ E. Cannan, *A Review of Economic Theory* (London, 1930), pp. 337-38; see also *Reflections*, p. 9.

¹⁰⁶ *Reflections*, p. 15. Turgot subscribed to the physiocratic view that wage earners in industry and manufacturing produced no net product and were therefore sterile. He admitted that manufacturers at times received a greater return than was necessary to cover their expenses, but he attributed this net or surplus to the imperfectness of competition, saying that it came ultimately out of the landed proprietor's net product (Weulersse, I, 291, 296, 302).

¹⁰⁷ See notes to his translation of Josiah Tucker's *Questions importantes sur le commerce* (1755), in E. Daire (ed.), *Œuvres de Turgot* (Paris, 1844), I, 330-31. He declared that an oversupply of *all* labor was impossible; that a *relative* oversupply could exist only in certain trades and would tend to disappear, given no obstacles to competition; that if a relative oversupply existed in some given profession, a proportional redistribution of this excess among all the professions would reestablish "equilibrium" (*ibid.*, pp. 330-31 nn.). For a different view see his treatment of charity, below.

¹⁰⁸ In a comment (1768) upon Gaslin's work, however, Turgot stated that even under conditions of competition in rich and civilized countries, savants, doctors, artists, actors, writers, *et al.*, received wages high enough to enable the recipients to live in luxury or comfort and accumulate savings. He did not try to account for the highness of these wage incomes, however (*Œuvres*, I, 443-44).

¹⁰⁹ *Reflections*, pp. 12, 97. "The Husbandman is the only person whose labour produces something over and above the wages of the labour. He is therefore the sole source of all wealth" (*ibid.*, p. 9). Already in 1755 in a note to his translation of

From Turgot's various comments one gets an imprecise conception of his notion of a subsistence wage. First, the wage rate per hour needed to be high enough to enable a workman to earn the necessary minimum means of existence within a physiologically reasonable number of hours a day. For while "no man works as much as he could," workmen normally relaxed little if any more than was physiologically necessary. Second, the minimum money wage that was necessary to induce workmen to continue to work needed to suffice for the support of the workman and his family at a level of life slightly above the bare subsistence level.

If a workman cannot live by his labour, he becomes a mendicant or leaves the country. That is not all: it is necessary that the workman obtain a certain profit, to provide for accidents, to bring up his family. In a nation where trade and industry are free and vigorous, competition fixes this profit at the lowest possible rate. . . . That kind of superfluity out of which retrenchment can, strictly speaking, be made, is nevertheless a necessary element in the usual subsistence of the workmen and their families.¹¹⁰

Actually competition was never "keen enough" in industrial occupations "to prevent at any time a man who was more expert, more active, and, above all, more economical than others in his personal consumption, from gaining a little more than was necessary for the subsistence of himself and his family and from saving this surplus to create therewith a little store."¹¹¹ Third, although, as we show below, Turgot at times assumed the necessary standard of life or "livelihood" to be subject to secular expansion, he noted also the downward pressure exerted by growth in numbers upon such expansionist tendencies. Conditions of "supply and demand," he observed, often pushed "the current

Tucker's work, Turgot said that "land is the only real and permanent wealth" (*Œuvres*, I, 334 n.).

¹¹⁰ Letter to Hume, in 1767 (*Reflections*, pp. 108-10). In 1770, in a discussion of taxation, Turgot said that a tax which reduced the workman's capacity to buy superfluities would diminish the supply of labor, thus indicating that superfluities constituted a necessary element in the standard of life of workmen (*Œuvres*, I, 185-86; also pp. 443-44).

¹¹¹ *Reflections*, p. 44. "Wage-receivers," especially nonagricultural "undertakers," received "a superfluity beyond their subsistence" in part because of "their talent and . . . their activity" (*ibid.*, p. 97).

price" of labor above its "fundamental price" (i.e., "what his subsistence costs the workman"). Yet, since "wants" remained "always the same," and a supra-fundamental wage level served to attract immigrants and to stimulate natural increase, the competition of the resultant growing supply of labor tended to depress the market price of labor back to the "fundamental" level.¹¹² He reasoned, therefore, as did a number of his contemporaries, that taxes on consumption goods used by wage earners usually fell upon the landed proprietors, the only recipients of "net produce," inasmuch as the "current price" of labor usually approximated its "fundamental price." For, given this condition and given a tax which increased the monetary cost of that which the workman and his family normally consumed, the number of workmen would continue to diminish (through emigration and presumably through death or morbidity) until the reduction in their number had elevated the money wage by the amount of the tax; the number of workers would remain intact only on condition that the money wage were increased by the amount of the tax.¹¹³

It is implicit in what has been said that Turgot assumed the supply of subsistence to be the main determinant of population growth. Population increases when wages and the level of comfort rise.¹¹⁴ If, on the contrary, the supply of subsistence diminishes, numbers decline. If each man consumes 3 *setiers* of

¹¹² Letter to Hume, *Reflections*, pp. 108-10; *Œuvres*, I, 185-86, 221, 241, 437-38. In 1770 he wrote (*ibid.*, I, 438): "This well-being and this abundance of wages offered stimulate the population; the fecundity of the soil calls over foreigners, multiplies men; and the multiplication of men by their competition in turn causes wages to fall. . . . The market value of provisions, revenue, wages, population, are things linked one with another by a reciprocal dependence, and which put themselves in equilibrium conformably to a natural proportion; and this proportion is always maintained when commerce and competition are entirely free." He implied, however, that this "natural proportion" did not necessarily and always mean subsistence wages (*ibid.*, I, 438).

¹¹³ Letter to Hume, *Reflections*, pp. 108-10; *Œuvres*, I, 184-86, 412, 436-38, 443-44. He admitted (*ibid.*, I, 443-44) that some wage receivers earned appreciably more than subsistence, but said that their number was "always very small" and that, if taxed indirectly, they would refuse to work or offer their labor elsewhere.

¹¹⁴ *Œuvres*, I, 221, 438. "The augmentation of the conveniences of life will increase the population" (*ibid.*, I, 194). Population growth, whether through immigration or natural increase, "implies always . . . comfort" on the part of the "people" (*ibid.*, I, 221). At least as early as 1750 Turgot wrote: "The wealth of a state consists in the number of men, and the number of men depends upon the employment that is given to them and upon the aliments that are furnished to them" (Schelle, *op. cit.*, *R.H.S.*, IV, 8).

grain, or the equivalent thereof, and production declines by x *setiers*, population will decline by $\frac{x}{3}$ men.¹¹⁵ Given a deficiency

of subsistence and an infrasubsistence wage level, death, sickness, and emigration serve to reduce numbers, affecting first the laboring classes and eventually (assuming land to yield no net product) the noncultivating proprietors. Given comfort and abundance, natural increase and immigration swell the population.¹¹⁶

That population growth, in Turgot's opinion, was conditioned in some degree by living standards, is evident in his occasional references to this relationship. Men "fear . . . the bonds of marriage [and] the cares and cost of children," he wrote in 1751, adding that dominance of marriage by ambition and economic interests was inimical to family survival and to the morality of customs.¹¹⁷ In 1770 he indicated that while the line of causation ran from increases in the level of comfort to increases in population to increases in the price of provisions to extensions of cultivation to declines in the price of provisions, the secular recurrence of this chain of events was accompanied by a secular rise in the level of comfort. "It is by these alternative and slight undulations in prices that the entire nation advances by degrees to a higher point [the level of] cultivation, of comfort, of population that it is able to enjoy, given the extent of its territory."¹¹⁸ Presumably, judging from his early (about 1750) discourses on "progress," and from his emphasis upon the progressive and perfectible character of the human mind, Turgot anticipated a secular improvement in the human lot.¹¹⁹ He did not integrate his

¹¹⁵ *Œuvres*, I, pp. 214-15.

¹¹⁶ *Ibid.*, pp. 184-86, 215, 241. Were the exportation of grain accompanied by an increase in real wages, population growth would be stimulated, and the resulting competition would restore wages to the natural level (*ibid.*, p. 221). The interest of the workers consisted not in high or low grain prices, but in constant grain prices, for population, wages, grain prices, and agricultural revenue were reciprocally related "and placed themselves in equilibrium according to a natural proportion," given economic liberty and (presumably) time for adjustment (*ibid.*, pp. 234-35).

¹¹⁷ *Ibid.*, II, 791.

¹¹⁸ *Ibid.*, I, 194.

¹¹⁹ See his discourses on history and progress, *ibid.*, II, 586-671; also Condorcet's comment, *ibid.*, I, xxix. Turgot rejected the climatic theory of Montesquieu, saying that psychological (i.e., cultural) factors dominated the course of history, that man progressed principally through trial and error and not through mere use of his reason. Nevertheless, Turgot asserted that the rate of progress was increasing, and would increase even more as man's knowledge of cause and effect expanded (Bury, *Progress*, pp. 153-58).

treatment of the cumulative character of culture with his discussion of population, however, as did Condorcet, his disciple.

Turgot virtually ignored the influence of the power and tastes of proprietors upon wage levels and population trends. He did not in general subscribe to a "force"¹²⁰ theory of wages, presumably because he supposed that wages usually were fixed by forces of supply and demand beyond individual control;¹²¹ and that when the profits of the proprietors and cultivators (whose expenditures constituted the "unique fonds des salaires de toutes les autres classes de la société") increased, employment and wages also increased.¹²² He recognized, however, that workers tended to be exploited when employers arranged not to compete effectively for labor; therefore, he sought the suppression of all French regulations and institutions which limited the opportunities open to workers and curbed the competition of employers for the services of labor.¹²³

Turgot at times came close to being a Malthusian. Although he believed everyone to possess the right to work, to security, and to succor,¹²⁴ he condemned indiscriminate charity, because it diverted resources from productive uses, destroyed wealth, increased the number of idle, multiplied disorder, and burdened the industrious. He advocated, and as an administrator, sought,

¹²⁰ See below, Chapter VIII, for the "force" theories of Necker and Linguet. Turgot admitted, however, despite his supposition that the prices of labor and of provisions generally tended to move in the same direction and degree, that in good years competition, and in bad years unemployment and fear of misery, often depressed the wages of labor to a very low level. He noticed too that proprietors often took advantage of the depressed condition of the workers to lower their wages, but did not emphasize the complete dependence of labor upon the proprietors (*Œuvres*, I, 236-37; *Reflections*, pp. 10, 15-25).

¹²¹ He advised landed proprietors to use the *métayer* system, or a fixed rent system, rather than hire laborers to till the land in exchange for wages. This last "method is extremely expensive, unless a large population and a scarcity of employment in the other kinds of work force the workmen to be content with very low wages" (*Reflections*, p. 18). He did not presuppose a work-seeking industrial reserve army (see n. 107, above).

¹²² *Œuvres*, I, 213-14, 238-39; Schelle, *R.H.S.*, IV, 12.

¹²³ Sée, *L'évolution*, pp. 236-40.

¹²⁴ "The poor have incontestable claims on the abundance of the rich; humanity and religion alike make it a duty on us to relieve our fellow-creatures when under misfortune. . . . What the State owes to all its members is the destruction of the obstacles which impede them in their industry, or which trouble them in the enjoyment of the product which is its recompense" ("Fondation," *Encyclopédie*, 1756, in *Œuvres*, I, 300, 305).

the suppression of mendicancy and the employment of all idle able-bodied persons, whether men, women, or children.¹²⁵

To enable a large number of men to live gratuitously is to subsidize idleness and all the disorders which are its consequences. [Charity which renders the ne'er-do-well's condition preferable to that of the honest workman] diminishes for the State the sum of labour and of the productions of the earth, a large part of which is thus left necessarily uncultivated. Hence frequent scarcities, the increase of misery, and depopulation.¹²⁶

Yet he was not essentially Malthusian in his philosophy. He at times subscribed to a kind of wages-fund doctrine,¹²⁷ and noted that wages tend to increase in consequence of capital accumulation.¹²⁸ But he did not advocate the limitation of population growth; nor did he specifically condemn luxury as a check to progress in numbers and wages,¹²⁹ perhaps because "the fall in the rate of interest proves that, in general, economy has prevailed over luxury in Europe."¹³⁰

In his discussion of the capacity of given areas of land to yield subsistence and thereby support population, Turgot pointed out that such capacity is definitely limited, the limit being fixed by the skill of the population using the land and by the operation of the laws of diminishing returns at the extensive and the intensive margins. He added, however, that the population of France had by no means approached the supportable limit. "The fertility of the soil is limited," he wrote in 1768.¹³¹ "A determined extent of land is able to support a certain number of men, and when it [number] is not there, it is the fault of the administration," he wrote in 1755.¹³² Land varied in fertility, the best tend-

¹²⁵ *Ibid.*, I, 300-301, 305, 308; also his administrative regulations, etc., in *ibid.*, II, 1-98, 451-62. Turgot recognized both the principle of productivity and that of need in his regulation of the payment of those receiving employment relief in state charitable institutions (*ibid.*, II, 461). He fixed the level of remuneration below that in private industry.

¹²⁶ *Ibid.*, I, 300-301.

¹²⁷ *Œuvres*, I, 213-14.

¹²⁸ *Ibid.*, I, 443.

¹²⁹ He observed that luxurious consumption checked capital formation (*Reflections*, p. 80), and that proprietors often consumed the whole of their "superfluity in frivolities" (*ibid.*, p. 13).

¹³⁰ *Ibid.*, p. 80.

¹³¹ *Œuvres*, I, 436; also 420.

¹³² *Ibid.*, I, 334 n. "Land is the sole real and permanent wealth," he stated, adding, however, that at times small industrious countries (e.g., Holland) could "prevail" in commerce and politics over larger countries (*ibid.*, I, 334).

ing to be occupied first, he observed in 1766, thus implying that an increase in numbers resulted in diminishing returns at the extensive margin.¹³³ In 1768, in a commentary embodying what is probably the first explicit formulation of the laws of increasing and diminishing returns at the intensive margin,¹³⁴ Turgot indicated that successive increments of "advances," or of cultivation, would be accompanied up to a certain point by increasingly larger increments of yield per marginal increment of input; that "past this point, if the advances be still increased, the produce will increase, but less, and always less and less until the fecundity of the earth being exhausted, and art unable to add anything further, an addition to the advances will add nothing whatever to the produce."¹³⁵ In another commentary made in the same year (1768) Turgot indicated that cultivation had not yet become so intense that further advances would produce little or no additional profits.

As the fertility of the soil is limited, there is without doubt a point at which the augmentation of advances would not augment production in the same proportion as the augmentation of expenses, but until now this limit is far from being attained, and experience proves that where advances are most heavy, that is to say, where cultivators are most wealthy, there is not only the greatest total production, but there are the greatest *net products*.¹³⁶

Despite his grasp of the laws of returns, Turgot did not effectively integrate his treatment of these laws with his discussion of wage and population theory.

¹³³ *Reflections*, pp. 9, 11-12.

¹³⁴ Turgot's formulation of the law of diminishing returns appears in his *Observations sur le Mémoire de M. de Saint-Péravy*, in *Euvres*, I, 418-33. A similar statement appears in his *Observations sur le Mémoire de M. Graslin* (*ibid.*, pp. 434-44). Saint-Péravy, a physiocrat, had supposed the ratio of returns to advances in agriculture to remain constant. Turgot denied that this ratio was constant; it increased, he said, as the number of increments of "advances" increased up to a certain point, and thereafter decreased until a point was reached at which further increments of "advances" brought about no further increases in total yield. Although Turgot refers to Jethro Tull's work, the argument is purely theoretical. On Turgot's treatment of the productivity of capital, see Commons, *op. cit.*, pp. 492-500.

¹³⁵ *Euvres*, I, 420, 421. Already in 1766 Turgot apparently recognized the operation of increasing returns in agriculture, for he said: "As rich Cultivators can provide the land with much more labour and manure, there results from it a prodigious increase in the produce and revenue of estates" (*Reflections*, p. 24).

¹³⁶ *Euvres*, I, 436. His italics.

Turgot devoted very little attention to the relation between the foreign trade of a country, and its capacity to support population. He noted that Holland could support part of its population through international trade, but implied that a nation derived its support principally from its own agriculture.¹³⁷ Freedom of trade in grain, he wrote fifteen years later (1770), would not injure France, inasmuch as production proportioned itself to habitual consumption and habitual exportation; moreover, by augmenting the demand for grain, it would increase the "somme des travaux," diminish unemployment if it existed, and tend to increase the wages and comfort of the working population.¹³⁸ He not only opposed mercantilistic colonial policy, but also predicted its doom. Mother countries, he wrote in 1776, "will be forced to abandon all empire over their colonies, to leave them entire freedom of commerce with all nations, to content themselves in partaking along with the others this liberty, and in maintaining with their colonies the ties of friendship and fraternity."¹³⁹ In one place, however, he suggested that, however well administered a state was, it could free itself completely of poor and needy persons only if it had colonies to people.¹⁴⁰

IV

The dynamic aspects of population growth were treated more fully by Jean Herrenschwand (1728-1811), a Swiss-born sometime French official,¹⁴¹ than by any other French author. Throughout his works runs the view that although man's procreative power is without inherent limit, population "can multiply only

¹³⁷ *Œuvres*, I, 334 n.; see also Schelle, *R.H.S.*, IV, 8-9, 11.

¹³⁸ *Ibid.*, I, 218-21.

¹³⁹ *Ibid.*, II, 581. In 1750 and again in 1776 he predicted that the American colonies would break away from Great Britain (*ibid.*, II, 564, 602).

¹⁴⁰ "Fondation," *ibid.*, I, 301.

¹⁴¹ A. Jöhr, *Jean Herrenschwand: ein schweizerischer Nationalökonom des achtzehnten Jahrhunderts*, Berner Beiträge zur Geschichte der Nationalökonomie, XIII (Bern, 1901). Herrenschwand's chief works are: *De l'économie moderne, discours fondamental sur la population* (London, 1786); *De l'économie politique et morale de l'espèce humaine* (London, 1796). He also published a number of other works. He borrowed his conception of human nature from Shaftesbury, was influenced by Adam Smith and Arthur Young, apparently knew some of the works of Benjamin Franklin, James Steuart, Matthew Decker, R. Price, Davenant, and W. Temple; he was a critic of Necker's views and policies. Arthur Young (*Travels in France*, Dublin, 1793, II, 378) praised Herrenschwand's work highly.

in proportion to its support," and does increase as man's cultural progress enables him to increase the available food supply. He seems to have believed, moreover, despite his great faith in man's capacity for intellectual and cultural progress, that unless appropriate economic policies were pursued by statesmen, population pressure and misery would be the lot of the lower classes, who comprised about three quarters of the population.

Herrenschwand distinguished three main stages in economic evolution: the hunting, the pastoral, and the agricultural. In each stage the population is limited by the food supply which, whatever its nature, is founded upon the "vegetable kingdom."¹⁴² Hunting peoples "multiply naturally" to the limits of the edible animal supply, which is governed by the spontaneous production of the earth; their number, while oscillating, "remains invariably the same." In bad years famine destroys some and weakens others, who in consequence succumb to disease; in good years the procreative force carries the population temporarily above the long-time level. At all times war and the abandonment of the young, the sick, and the aged bring death to many.¹⁴³ Pastoral peoples enjoy a greater food supply than hunting peoples; yet they too multiply to its limits. When this stage is reached, a chief detaches himself from the main body and, aided by his followers, reduces a more civilized but weaker people to servitude.¹⁴⁴

An agricultural economy may assume one of three forms: absolute agriculture; agriculture founded upon slavery or serfdom; free agriculture combined with manufacturing. In an absolute agricultural economy—one in which the land is divided among self-sufficient, independent families—population continues to grow until the land becomes infinitely subdivided, and famine, misery, and excessive mortality operate almost continually, even as among hunting peoples, to destroy the excess product of "abusive multiplication."¹⁴⁵ Consumption in an absolute agricultural economy must always remain simple, for such export surpluses of subsistence as exist prior to the development of

¹⁴² *De l'économie moderne*, p. 26. This work is dedicated to Louis XVI.

¹⁴³ *Ibid.*, pp. 7-12.

¹⁴⁴ *Ibid.*, pp. 18-21.

¹⁴⁵ *Ibid.*, pp. 27, 30-42.

population pressure can purchase only a small quantity of foreign manufactured products.¹⁴⁶

In a slave economy subsistence is produced by the portion of the population in servitude, members of which receive only the barest subsistence. What the slaves produce beyond their simple needs subsists the free population, which has the choice of living in idleness or engaging in manufacturing. If the free population remains idle it can enjoy no luxuries, inasmuch as labor in the state of slavery or serfdom is wholly unsuited to engage in manufactures. If, however, the free population engages in manufacturing, it can enjoy the luxury of its own fabricated goods. The size of the slave population is fixed by the supply of subsistence; ideally it should be such as will permit the production of a maximum supply of subsistence for the free population. The size of the latter is determined, in the absence of foreign trade, by the volume of subsistence made available to it by the slave population; it can become larger still if the free population works and exchanges some of its manufactures for subsistence produced abroad. In a slave economy the slave population, unless subjected to numerical regulation by the free population, will continue to grow until it consumes subsistence which otherwise would have been available for the free population.¹⁴⁷ The free population likewise will grow to the limits of the subsistence it obtains from its slaves and (if it exports manufactures) from abroad. When this limit has been reached, the excess free population must form colonies.¹⁴⁸

The population of an economy founded upon free agriculture and manufacturing consists of three main classes: the cultivators, the manufacturers, and such consumers as are not in any sense cultivators or manufacturers.¹⁴⁹ The total population is fixed by the total supply of subsistence made available. Although these

¹⁴⁶ *Ibid.*, pp. 42-48. Goods exchanged, Herrenschwand implies, according to the subsistence cost of the labor embodied in them. Accordingly, since manufactured products embodied five to a million times as much value in the form of labor's subsistence as in the form of raw material, an agricultural nation could afford to buy very little fabricated stuff abroad (*ibid.*).

¹⁴⁷ *Ibid.*, pp. 69-70. Herrenschwand here implicitly postulated diminishing returns in agriculture. He did not explicitly discuss laws of returns, however.

¹⁴⁸ *Ibid.*, pp. 53-70.

¹⁴⁹ *Ibid.*, pp. 74-78, 327-28, 336-39.

three classes are mutually interdependent,¹⁵⁰ the major impetus to their growth, prior to the population's having attained the maximum size, is to be found, Herrenschwand's whole analysis suggests, in the factors making for the expansion of manufactures and therefore of the demand for agricultural products. The consuming class, as defined above, is a "quasi-constant quantity," for the procreative capacity of this class is very much reduced by its luxurious mode of living.¹⁵¹ The agricultural population tends to expand, other things equal, in proportion as it can sell what it produces in excess of its subsistence to the nonagricultural population, which consists predominantly of persons engaged in the creation and distribution of manufactures; for rural marriages increase or decrease, and agricultural production augments or declines, according as the market for the agricultural surplus expands or contracts.¹⁵² It is incumbent upon the statesman, therefore, to see that no artificial obstacles are permitted to hamper the expansion of manufactures and the employment therein of potential consumers of agricultural products.¹⁵³ It is equally incumbent upon the statesman not to prevent the introduction of better methods in agriculture and the consequent diminution of the rural population. For the total population of the country is determined by the supply of subsistence and not by the size

¹⁵⁰ *Ibid.*, pp. 217-18, 443. In consequence, although productivity is greater in an agricultural-manufacturing economy, subsistence is not assured to everyone, as in other economies (*ibid.*, pp. 72-74).

¹⁵¹ *Ibid.*, pp. 337-38. Nonetheless, Herrenschwand considered *luxé* (i.e., the desire for goods other than subsistence) to be prerequisite to population growth; as *luxé* expanded, manufacturing expanded, and with it the demand for agricultural products and the rural population. In short, while *luxé* checked population growth among the relatively few sumptuous consumers, it favored it in the numerically preponderant classes (*ibid.*, pp. 338-40, 422-27). "Luxé de table," he said, could affect per capita consumption of subsistence in only a minor degree (*ibid.*, p. 325). He stated elsewhere (*ibid.*, p. 205), however, that when funds are squandered on foreign luxuries (e.g., in Bengal) rather than used to increase the capital supply, unemployment increases and many perish of hunger and misery.

¹⁵² *Ibid.*, pp. 308-29, 339-51.

¹⁵³ *Ibid.*, pp. 74, 82-86, 102-16, 477-78. He referred in particular to unwarranted restrictions upon individual liberty and pursuit of self-interest, burdensome taxes, sumptuary laws, "hoarding," the importation of foreign manufactures, and the pursuit by the state of fiscal policies that elevate the interest rate (*ibid.*, pp. 56-58, 84-85, 135-39, 211-12, 221, 248-49, 274, 351-53). He added, furthermore, that the agricultural population would not expand, even in response to a favorable manufacturing situation, if the exportation of grain was prohibited, or if agriculture was burdened with heavy taxes and otherwise restricted (*ibid.*, pp. 84, 319, 361-62, 402-04).

of the rural population;¹⁵⁴ and the power of the nation is conditioned by the size of its manufacturing population, which grows in proportion to the surplus food that the agricultural population produces above its own subsistence. Had French statesmen pursued sound economic policies, he noted, France's population would number forty million.¹⁵⁵

Even under the best of circumstances in an economy founded upon free agriculture and manufacturing—i.e., when the economy is moderately progressive, "capital" exceeds "labor," and wages are above the subsistence level—man's excess procreative capacity will give rise to population pressure and its concomitants, famine, misery, and heightened mortality, unless the excess population is colonized, Herrenschwand asserted; but he did not recommend moral restraint or recourse to other methods of curbing population growth. Moreover, like certain nineteenth-century German economists, he warned against making a nation dependent upon foreign subsistence obtained in exchange for domestic manufactures; for were the foreign food supplies to fail for any reason, or were some of the foreign markets for manufactures to be lost, famine and death would become the lot of the excess domestic population.¹⁵⁶ He proposed instead that, prior to the development of population pressure in a nation, it establish a very large colony abroad and prepare to finance the movement thereto of

¹⁵⁴ Herrenschwand estimated that the ratio of men and horses per acre was such under a system of "large" and "small" farms, respectively, that under the former system a given area required for its cultivation the equivalent of only 68 per cent as many agriculturalists as were required under the "small" farm system (*ibid.*, pp. 281-84). All these released workers could enter manufacturing, the demand for whose products (he assumed) was infinitely extensible since there was no limit to man's artificial wants (*ibid.*, pp. 1-2, 440). He criticized Price for inferring that the British population had declined from the fact that rural population had decreased (*ibid.*, pp. 298-304).

¹⁵⁵ *Ibid.*, pp. 86, 285. The power of the state rested upon men and money (*ibid.*, pp. 473-74). Tax revenue varied directly with the size of the manufacturing population, and inversely to the smallness of farms and the largeness of the rural population (*ibid.*, pp. 296-97). A nation such as France could produce as much food, were one fourth in place of one half its then population engaged in agriculture; as a result, manufacturing, state revenue, and national power would be greatly extended (*ibid.*, p. 442).

¹⁵⁶ *Ibid.*, pp. 475-80, also pp. 102, 106, 108-23, 137-39, 173-74. He therefore rejected Adam Smith's defense of "indefinite liberty" in international commerce (*ibid.*, p. 139). Only within the national boundaries was free competition an adequate adjusting mechanism (*ibid.*, pp. 137-38). England had so many destitute inhabitants because she had lost part of her foreign market (*ibid.*, pp. 118-23).

its excess population. Not much capital would be required, he said, inasmuch as the excess land of new countries called for hands, just as did the excess capital in old countries.¹⁵⁷ Were Europe to pursue a colonizing policy along these lines, population pressure would not develop there so long as governmental policies remained sound, and men were happy and free to multiply as "providence" desired. He had in mind peaceful economic expansion into the unsettled parts of the world, not the territorial extension and control advocated by the bellicose mercantilists; for he saw in foreign commerce a source of international strife, and in war a check to population growth.¹⁵⁸ What policies would be in order when the world had become completely colonized and fully peopled he did not consider.

Believing that wages should always remain above the subsistence level,¹⁵⁹ Herrenschwand opposed the stimulation of marriage and immigration, and pointed out that certain agents which destroyed excess population at times operated to the advantage of the masses. He distinguished three stages of development in an agricultural-manufacturing economy: (1) moderately progressive prosperity, when "capital" exceeded "labor" and in consequence wages exceeded subsistence; (2) arrested prosperity, when "capital" equaled "labor" and wages were at the subsistence level; (3) retrograde prosperity, when "labor" exceeded "capital" and wages were below subsistence.¹⁶⁰ Given the first condition, population tended to grow as rapidly as desirable without stimulation, for men married and multiplied whenever they enjoyed comfort. Given the second or third condition, encouragements to marriage and immigration, even though temporarily successful, depressed wages, augmented misery, and thus failed in the long run to increase population.¹⁶¹ Given the second or third condition, any

¹⁵⁷ *Ibid.*, pp. 208, 480-487.

¹⁵⁸ *Ibid.*, pp. 485-88; Silberner, *op. cit.*, pp. 221ff. Herrenschwand attributed the misery of China to population pressure occasioned by failure to pursue a rational colonization program, and the underpopulation and population pressure in France to unsound governmental policy (*De l'économie moderne*, pp. 86, 485-87).

¹⁵⁹ It was preposterous to say that low wages were favorable to national prosperity. On the contrary, a nation was never prosperous when wages were low, or when the interest and profit rates were high; for then the supply of capital was deficient, and the bulk of the population was in misery (*ibid.*, pp. 202-03, 211-21).

¹⁶⁰ *Ibid.*, pp. 415-20, 431-32.

¹⁶¹ *Ibid.*, pp. 415-22, 427-29, 431.

calamity which reduced the working population in a relatively greater measure than "capital" tended to elevate wages and to improve the lot of the surviving workers; only given the first condition, was a calamity of this sort prejudicial to the welfare of the nation and of the survivors. Whatever the circumstances, any calamity that diminished "capital" relative to "labor" operated to depress wages and to increase misery.¹⁶² Reasoning in analogous fashion, Herrenschwand said that the introduction of labor-saving machinery tended to favor population growth and/or improvement in the scale of living provided that "capital" exceeded "labor," wages were above the subsistence level, and there existed a "void (*vuide*) in the arms [labor supply] of the nation"; but that given the second or third condition above, the introduction of labor-saving devices tended to depress wages below the subsistence level and to check population growth.¹⁶³

v

C. F. J. Auxiron (1728-1778), an engineer, subscribed to certain of Quesnay's views. Auxiron's work is significant chiefly because of his analysis of the determinants of population capacity, and his treatment of the relation between population growth and the interoccupational and interclass movements and balance in society.¹⁶⁴

The population capacity of a country was conditioned by whether or not its economy was closed. The supply and quality of its land, together with the efficiency of cultivation, determined the population capacity of an isolated country (i.e., a closed economy).¹⁶⁵ Commerce, whether between the regions of a given country or between countries, swelled the population capacity of a land. For commerce enabled the inhabitants of each region or country to use their land primarily in the production of com-

¹⁶² *Ibid.*, pp. 458-65 and 468-72.

¹⁶³ *Ibid.*, pp. 430-40, 444-45. In England, where machinery had been too rapidly introduced, there were many poor (*ibid.*, pp. 438-40). Division of labor, in contrast to the introduction of machinery, greatly augmented per capita production without displacing any labor (*ibid.*, pp. 446-57).

¹⁶⁴ *Principes de tout gouvernement ou examen des causes de la splendeur ou de la foiblesse de tout état considéré en lui-même, & indépendamment des mœurs* (Paris, 1766). Auxiron advocated mathematical treatment of economic problems (*ibid.*, I, Preface, p. v.).

¹⁶⁵ *Ibid.*, I, 50; II, 296.

modities to which the land was most adapted; it thus allowed each portion of land, and all land taken together, to yield the largest attainable supply of provisions. Without specialization and commerce land would produce less.¹⁶⁶

The population capacity of any one state and of all states had a definite upper limit, for the capacity to produce subsistence did not depend solely upon labor or expand in the same proportion as the labor supply. "The experience of all places and of all centuries shows that the fecundity of the earth does not depend solely upon the labors of men."¹⁶⁷ Not only was food production limited by the amount of land available; it failed to keep pace with population long before the population maximum was reached. Lands differed in quality, the best tending to be settled first. As population grew, and cultivation was extended to hitherto unused and presumably inferior land, the amount of work needed to produce a given quantity of goods necessarily increased, the output per cultivator fell, and the condition of the population became worse, those on the worst land under cultivation producing only subsistence.¹⁶⁸

That Auxiron believed that population tends to press upon subsistence is evident in his discussion of population growth and emigration. Natural fecundity being constant, the actual rate of growth varied with external circumstances, with the *mœurs*: in Europe, for example, many institutions retarded population growth. When the female population was not fatigued and worn out, and men were not under compulsion to move to infertile

¹⁶⁶ *Ibid.*, I, 50; II, 4-7, 296-97, 313-14. "Commerce, by putting each Province in the condition of cultivating in its soil only the provisions to which it is most suited, not only gives more of abundance, but also causes everything to be of a much better quality" (*ibid.*, II, 6-7). Commerce also multiplied the kinds of things in use; it thus made life more pleasant and activated the emulation which motivates men to desire goods and to work for them (*ibid.*, II, 3-4).

¹⁶⁷ *Ibid.*, II, 302-03. China and Switzerland, he said, despite the perfection of their agriculture, were producing all they could and yet could not subsist their populations. "It is astonishing that . . . M. Rousseau . . . strongly supported the proposition . . . that the earth yields in proportion to the labors of those who cultivate it" (*ibid.*, II, 302, 304).

¹⁶⁸ *Ibid.*, I, 25-26, 32-35, 41-43, 109-14; II, 174-75. "Men augmenting in number, they proceed in clearing from less fertile to even less fertile land" (*ibid.*, I, 25). Population growing, cultivators till "new fields less good than the first" (*ibid.*, II, 174). Where land is good the arts flourish, where bad they hardly develop (*ibid.*, I, 22-24, 60-62, 74-92).

lands, numbers could increase one thirtieth per year; in new colonies, containing only males and females of marriageable age and in equal numbers, a rate of increase of one twelfth per year was possible.¹⁶⁹ When no obstacles are placed in the way of population growth, he stated, unwanted increase takes place and many are reduced to a propertyless state;¹⁷⁰ an insufficiency of provisions develops, curtailment of consumption becomes necessary, and privation and misery become widespread. Population growth itself comes to a halt soon after population is "at a par with its means of subsistence," for then the poverty stricken are no longer able to marry and support families, or to rear to adulthood such children as they produce.¹⁷¹ Under these circumstances, Auxiron apparently believed, emigration did not insure permanent relief of overpopulation; for "emigration, putting at greater ease the inhabitants who remain in a country, enables them soon to increase . . . & repair promptly the loss of the state."¹⁷²

Even though Auxiron believed that a state was as fully peopled as circumstances permitted, when internal commerce was unfettered and all land had been brought under completely efficient cultivation, and that further growth would precipitate misery, he did not advocate moral restraint or other curbs, and even looked with disapproval upon certain circumstances making for the deferment of marriage. Following a discussion of the checks recommended by Plato, Auxiron commended voluntary celibacy when inspired by the desire to improve one's condition;¹⁷³ but he characterized as contrary to the good of the state

¹⁶⁹ *Ibid.*, I, 57-59; II, 314. By 1856, he predicted, should no checks operate in France, her population of sixteen million would exceed one hundred and forty million (*ibid.*, I, 58).

¹⁷⁰ Auxiron defended property rights, saying that their acceptance prevented quarrels over inequality which had its origin in differences in talent, industriousness and effort, and the fertility of land owned by different persons (*ibid.*, I, 116-17, 121, 125-26).

¹⁷¹ *Ibid.*, II, 301-02. "The mass of wealth being necessarily limited in all states, it is evident that [a state can support] only a certain number of comfortable inhabitants, & that the majority must be everywhere without property" (*ibid.*, II, 300).

¹⁷² *Ibid.*, II, 26. Emigration had not depopled any country, Spain's depopulation being attributable to the decline of her internal commerce (*ibid.*, II, 23-27).

¹⁷³ The most natural and agreeable course to pursue with respect to control of population growth is "d'inviter au célibat par des commodités, de favoriser mouvement des classes, & de changer beaucoup de richesses foncières en viagères" (*ibid.*, II, 306-07, 314).

deferment of marriage and celibacy occasioned by economic uncertainty or by the desire to live well on a capital-consuming annuity.¹⁷⁴ Furthermore, while he approved of vertical mobility in principle, he proposed that colleges no longer enroll members of the lower classes and transfer them to the upper classes and thereby crowd the latter and check marriage and propagation in this portion of the population; for, were superior occupations reserved for members of the upper classes their nuptiality and natality would increase.¹⁷⁵ Auxiron condemned poor relief for the able-bodied on the ground that it fostered idleness, but not on Malthusian grounds.¹⁷⁶

In his discussion of wage formation Auxiron gave weight both to the scale of living and to circumstances which affected either the supply of labor, or the demand for it, by type of employment. In general, wages tended to be in equilibrium with the needs of the workers; for when workers did not receive enough on which to live, they suffered, and their number diminished until balance between wages and needs was restored.¹⁷⁷ Presumably, in Auxiron's opinion, workers tended to receive so little that their scale of living could not be contracted; for he said that taxes which were imposed upon workers, or upon provisions consumed by them, tended to be shifted to the comfortable classes who purchased the products of labor;¹⁷⁸ and that the number of hours workers found it necessary to work varied inversely with the wage rate.¹⁷⁹ Auxiron did not indicate that he expected the worker's scale of living to expand and push up the level of real

¹⁷⁴ He listed taxes, but not price-level changes, as a source of uncertainty (*ibid.*, I, 171-76; II, 273-74).

¹⁷⁵ *Ibid.*, II, 307-13. Auxiron may have had a eugenic objective in mind when he made this proposal, for he commented on the continual ascensional movement in France, and noted that the most intelligent tended to become ecclesiastics (*ibid.*, II, 311-13).

¹⁷⁶ *Ibid.*, II, 153. Auxiron attributed indigence and poverty to personal incompetence, to overconcentration of wealth, and to vicissitudes of war and life (*ibid.*, II, 297-98). In a fully peopled state, he said, it was necessary that the government store the grain surplus of good years so as to prevent scarcity in bad years (*ibid.*, II, 304-06).

¹⁷⁷ *Ibid.*, II, 244.

¹⁷⁸ "It always happens that he increases the price of his labor, in the measure that it costs him more to live, to clothe himself, to lodge himself" (*ibid.*, II, 261). Such an adjustment did not take place immediately, however. The workers bore the tax until misery diminished their number and enabled them to command a money wage augmented by the amount of the tax (*ibid.*, II, 262-64).

¹⁷⁹ *Ibid.*, I, 25-26, 31.

wages; nor did he discuss interoccupational differences in the scale of living as such. But he pointed out that wages were relatively low, and in proportion to the painfulness of the work, in trades requiring no special talent on part of workers and therefore accessible to everyone; and that remuneration was greater in arts and trades requiring talents not possessed by the common man, varying with the skill of the workers and with the outlays, pains, and other burdens incident to the trade or art.¹⁸⁰

More rounded than his analysis of wage formation was Auxiron's treatment of the mechanism whereby interoccupational balance was preserved. When one occupation was relatively overcrowded and another relatively undermanned, wages were lower in the former than in the latter; consequently, workers continued to shift from the low-wage to the high-wage occupation until "moral equilibrium" was re-established, workers in each occupation received the same pay for the same labor, and the product of each occupational class exchanged for that of the other on the basis of labor (*peine*) embodied.¹⁸¹ In general, "all classes of workers, all commodities, & generally all things, naturally place themselves in equilibrium."¹⁸²

Auxiron illustrates his thesis by supposing a nation with no more gentlemen and soldiers than the public welfare requires, with all citizens enjoying as much felicity as the nature of the soil permits, and with the nation's eight hundred thousand cultivators and one hundred thousand workers receiving equal pay. Specifically, each worker makes three tools a day, and receives in exchange from the cultivators, who purchase three hundred thousand tools daily, as much subsistence as the cultivator obtains for his day of work. Suppose now that each class doubles in number and that, because of diminishing returns at the extensive

¹⁸⁰ *Ibid.*, I, 65, 70-71, 121, 125-126.

¹⁸¹ *Ibid.*, I, 15-16. When a "just proportion" existed between blacksmiths and cultivators, tools exchanged for grain in such wise that equal quantities of labor of the two occupational groups commanded equal quantities of provisions or goods (*ibid.*).

¹⁸² *Ibid.*, I, 17-18. Inasmuch as all classes were constantly in flux, perfect equilibrium was never attained, even though the equilibrating tendencies were always present (*ibid.*). Different inclinations caused men to choose different occupations (*ibid.*, p. 19).

margin,¹⁸³ each cultivator must expend one third more labor to produce a given increment of provisions. Each cultivator will therefore demand one third more tools from each worker in exchange for a day's subsistence—i.e., four tools. Accordingly, if each worker now makes four tools a day in exchange for as much subsistence as a cultivator receives for a day's work, the two occupational groups will not be in equilibrium until 45,714 of the 200,000 workers return to the land, the cultivators number 1,645,714 relative to 154,286 workers,¹⁸⁴ and each worker in each group does one third more work for his subsistence than he did prior to the doubling of the population. If the surplus 45,714 workers do not return to the land, they will perish of the misery associated with their unemployment; or, if they are not wholly unemployed, each member of the worker group will earn only three fourths of the former and necessary wage, with the result that eventually as many will perish or remove themselves as must abandon toolmaking to restore the natural equilibrium.¹⁸⁵

Auxiron also analyzed the effect of population growth upon the class composition of society. The number of gentlemen in a society, and the volume of purchasing power at their command, depended upon the amount of revenue the Prince secured through taxation of land.¹⁸⁶ The number of persons in the employ of gentlemen, in the capacity of domestics and laborers, depended wholly upon the number and purchasing power of the gentlemen, and the number of persons engaged in the arts, professions, and luxury production depended thereon in part.¹⁸⁷ The revenue which the Prince could secure through taxation, and therefore the number of gentlemen and others who could be supported by

¹⁸³ Auxiron refers explicitly only to the extensive margin. Apparently he recognized that the necessity of extending cultivation to inferior soil implies diminishing returns at the intensive margin. He did not refer to the augmentation of rent attendant upon an extension of cultivation, presumably because he supposed this to go to the proprietors (*ibid.*, I, 27-29).

¹⁸⁴ Each day the 154,286 workers produce four tools each, or 617,144 in all. Each day three eighths (i.e., the same proportion as before the population doubled) of the 1,645,714 cultivators purchase one tool each, or 617,144 in all.

¹⁸⁵ *Ibid.*, I, 25-35.

¹⁸⁶ *Ibid.*, I, 36-41.

¹⁸⁷ *Ibid.*, I, 46-49, 109-14, 135. The number engaged in luxury production was conditioned too by the general level of comfort, which depended upon the fertility of the soil, and by the degree of urbanization (*ibid.*, I, 60-65, 72-92; II, 148).

that tax revenue, could not grow at the same rate as the population and the number of cultivators grew; for the gross and net yield of land—and therefore the source of tax revenue—did not grow at the same rate as population and the number of cultivators, inasmuch as each extension of cultivation involved bringing into use inferior and less productive land which yielded little, if anything, beyond unavoidable expenses of production. Accordingly, were inferior land taxed in proportion to the gross yield, not enough return would remain to the cultivator to support him and cover his other expenses of production, wherefore some of the inferior land would be abandoned;¹⁸⁸ and were inferior land not taxed, revenue would not increase in the same proportion as population.

Auxiron approved, with some qualification, of the production and consumption of luxuries, that is, of things giving pleasure. Luxury had always existed, its volume relative to the population depending upon the amount of wealth relative to the population; its production did not, therefore, keep pace with population growth when that growth caused cultivation to be extended to inferior grades of land.¹⁸⁹ It was not desirable to curb the use of luxury, inasmuch as the prospect of luxury and the desire to emulate animated men to work hard.¹⁹⁰ Nor was it desirable that members of all the lower classes be excluded from admission into the ranks of gentlemen, inasmuch as the prospect of such admission stimulated men to work.¹⁹¹ Auxiron asserted, how-

¹⁸⁸ *Ibid.*, I, 41-43, 52-55, 57; II, 226-27. Auxiron, whose views were approved in part by the physiocrats (Weulersse, I, 112), favored a tax proportional to the net yield of the soil (*op. cit.*, I, 53). A tax upon cultivators, as upon any class, diminished their number; it did not cause the nondisplaced cultivators to put forth enough additional effort to more than counterbalance the diminution in the number of cultivators (*ibid.*, 49). Auxiron assumed that since the rich spent a fixed sum on luxuries, any tax on luxuries caused a corresponding increase in the price of luxuries which the rich paid (*ibid.*, II, 249).

Isnard (see his *Traité*, below, II, 3) said, as did Auxiron, that a tax should be imposed on the net yield and not upon the gross yield of industry, but specifically included therein nonagriculture as well as agriculture. Auxiron, on the contrary, looked upon artisans as parasites (*op. cit.*, Preface) who created no net product.

¹⁸⁹ *Ibid.*, II, 156-57, 168-78.

¹⁹⁰ *Ibid.*, II, 188, 196 ff.

¹⁹¹ *Ibid.*, I, 56-57. If, however, too many were admitted, the superior classes would suffer, and their natural growth would be checked (*ibid.*, I, 56-57; II, 307-11). The upper classes could and would keep their numbers intact if livelihoods were to be had. If the colleges made possible the recruiting of ecclesiastics and superior occupations from the cultivating and worker classes (whence came 80 per cent of the clergy), the

ever, that if the wealthy in France reduced their expenditures upon luxuries and invested the resulting savings in agriculture and commerce, the nation's wealth and its capacity to support luxury would expand;¹⁹² and that if a government taxed agriculture too heavily, and drove workers out of agriculture and into luxury trades and the army, it weakened the state.¹⁹³

VI

Isnard's¹⁹⁴ views on population followed as corollaries from his thesis that the rights of private property and the system of natural economic liberty must be preserved against all actual or possible governmental interference. Economic events, movements, and adjustments were presided over by natural and necessary laws which operated, in the absence of state intervention, to establish a desirable equilibrium.¹⁹⁵ Accordingly, he rejected the doctrines of the populationists, for he believed the artificial stimulation of population growth to be both unnecessary and conducive to evil in that it was contrary to the laws of nature and inimical to the rights of property. Nature cared for human and animal propagation, and man could do little to help her. Population growth was held in check, not by infecundity, but by lack of subsistence and by the obstructions to economic production, which gave rise to this lack; for population growth was governed by economic conditions in general and by the volume

upper classes would lack livings for their children and therefore would hesitate to marry and rear children (*ibid.*, II, 310-13).

¹⁹² *Ibid.*, II, 151-53. Elsewhere (*ibid.*, II, 196-200) he opposed sumptuary laws, but said, much as did the physiocrats, that a change in the types of luxuries on which income was spent might be advantageous.

¹⁹³ *Ibid.*, I, 45-46, 53, 97-107. Believing absentee ownership to be unfavorable to production, Auxiron recommended that the right to own land be made contingent upon keeping it in use, and that no family be permitted to inherit more land than it could cultivate (*ibid.*, I, 138, 116-19; Weulersse, II, 446).

¹⁹⁴ A. N. Isnard (d. 1802 or 1803), like Auxiron, was an engineer; he employed algebra and symbols in his economic analysis. Isnard criticized the physiocratic theories of production, taxation, and government. He looked upon industrial labor as productive, since it created want-satisfying utility. Isnard referred to the opinions of the physiocrats, Vauban, Montesquieu, Pinto, Locke, Linguet, Boisguillebert, and others, but not to those of Smith, with which his (Isnard's) concurred in a large measure.

¹⁹⁵ *Traité des richesses* (London, 1781), I, Preface, esp. pp. vii, xiii, and 13-15, 28-29, 39. It was essential, he said, if man were to live as he ought in a "century of philosophy," that he master the natural laws of morals and politics.

of subsistence in particular. "Nature assigns limits to the multiplication of men" only in terms of the "production of subsistence." Population tended to increase so long as marriage was possible, and couples were happy, free from misery and indigence, in possession of liberty, and assured that they could provide for their children a lot at least as satisfactory as their own. Were the nation's economy organized in accordance with the principles of natural law and liberty, its population tended to grow to whatever level was consistent with the comfort of the people and the underlying circumstances.¹⁹⁶

Isnard rejected the scheme of values common to the populationists; for he looked upon population growth as a means, not an end;¹⁹⁷ and upon satisfaction-yielding consumption as the principal objective of a political or economic system.¹⁹⁸ He asserted, furthermore, that the system of natural liberty was most congenial to the development of a rich, powerful, and happy population; for under this system men had the incentive to work, wants could be gratified at the lowest possible cost, and parents were generally able to provide their children with a lot at least as good as their own.

The laws which favor the diminution of expense relative to the augmentation of satisfactions are the laws most favorable to population. . . . The greatest, the most comfortable or most rich population, must be the end of production. . . . Population increases rapidly in the bosom of wealth. . . . Leave to nature the care and means of enriching the man who works; leave to man, the producer, the liberty of deriving the greatest possible advantage from his property; . . . [Nature] requires the labor of man to increase and multiply wealth, & it produces men wherever comfort, liberty, and happiness reign. That the production of men and animals may be encouraged, it is necessary to favor the creation of wealth and subsistence.¹⁹⁹

Isnard condemned all population-stimulating measures on the grounds that they interfered with the system of natural liberty

¹⁹⁶ *Ibid.*, I, xvi-xvii, 80, 84-85, 88. Isnard did not catalogue the checks to population growth, but observed that mortality, traceable to indigence, carried off one-half the children before they reached the eighth year. High rates of population growth, such as Euler mentioned, could be realized only in places where wealth and subsistence grew very rapidly (*ibid.*, I, 84-85).

¹⁹⁸ *Ibid.*, I, xvii.

¹⁹⁷ *Ibid.*, II, 23.

¹⁹⁹ *Ibid.*, I, xvi, 80, 82, 89.

and the rights of property, and, if the population became too large, jeopardized the comfort of a people. The proper demographic objective was not the largest attainable population, but the "largest, most comfortable or most wealthy population"—as large a "population as the order of justice permits." When a country (e.g., China, Poland) contained as large a population as the land could support, many persons found it difficult to live. In fact, the maximum possible population supportable on a nation's territory could be achieved only through violation of the laws of property and the system of natural liberty. "Natural law does not permit a society to admit new members who must claim place there against the rights of citizens."²⁰⁰ Intervention by the government in favor of any industry for the purpose of stimulating population growth served to disturb the natural balance between employments;²⁰¹ it upset the adjustment of supply to demand in various branches of the economy, thus restricting the augmentation of output and wealth and usually retarding population²⁰² growth. Even though some branches of industry were more congenial than others to population growth, it was not desirable that they be encouraged in any manner that interfered with the natural tendency of a competitive economy to make goods available at the least possible per unit cost.²⁰³ In general, all arbitrary state interference with competitive private enterprise tended to disturb the natural industrial balance and the natural distribution of wealth and thus to check progress in numbers and comfort.²⁰⁴

²⁰⁰ *Ibid.*, I, 82-83; II, 23-24. Like Quesnay and others, Isnard said that comfortable peasants were more useful and efficient than poverty-ridden peasants (*ibid.*, I, 71).

²⁰¹ He pointed out that the fixity of the supply of land set limits to food production and that land tended to be distributed among employments so that each yielded the greatest possible product relative to expenses (*ibid.*, I, 46-47).

²⁰² *Ibid.*, I, 77, 89, 165, 221-22, also xvii-xviii. Isnard referred in particular to Colbert's favoring of manufactures at the expense of agriculture. Isnard was favorably disposed toward agriculture on the whole, saying that in rural areas customs, education, example, and nourishment combined to produce healthier and wiser subjects than could be reared in urban areas (*ibid.*, I, 83, 222).

²⁰³ *Ibid.*, I, 81-82.

²⁰⁴ *Ibid.*, II, 32. Arbitrary intervention (e.g., taxes on luxuries) was "contrary to the natural distribution of wealth which keeps luxury within just limits, & which must carry population to its maximum" (*ibid.*, II, 32). He condemned certain forms of state-supported charity. The state was obliged to aid the helpless and the infirm, but not to support the able-bodied poor. Were the state to support the able-bodied,

In consistence with his social philosophy, Isnard advocated nonintervention with respect to colonies and luxury. Colonies would flourish under the system of natural liberty provided that the mother country merely protected them against aggression. When the colonies had become wealthy under this system, the mother country would naturally benefit from trade with them.²⁰⁵ Luxury consumption was not bad in itself; it was to be condemned only if it originated in economic inequality traceable to violation and disregard of the laws of nature and property; it was not to be condemned when it was the natural concomitant of economic progress.²⁰⁶

Even though Isnard believed that population tended to grow as subsistence increased, he accepted the view that population in some parts of the world had been more dense in ancient times than in his day.²⁰⁷ Under the most favorable circumstances, he believed, population could readily grow one thirtieth per year; yet he estimated that French agriculture and industry were no longer improving at a rate sufficient to support comfortably the prevailing annual increase of $\frac{1}{144}$ (i.e., the rate prevailing in 1754-1763). Even if the laws were improved, governmental expenditures were limited, the tax system was reformed,²⁰⁸ obstructions to the expansion of some industries were removed, and uneconomic promotion of other industries was abolished, subsistence would increase only enough to permit the population to grow about $\frac{1}{144}$ per year and double in a century.²⁰⁹

Isnard formulated what is in essence a standard of living theory of wages, for, despite his recognition of the influence of demand, he took it more or less for granted and concentrated his attention upon the longer run determinants of the supply of labor. The

it would waste resources, encourage idleness, and violate the rights of property (*ibid.*, II, 22, n.).

²⁰⁵ *Ibid.*, I, xviii. Isnard did not discuss emigration, but condemned intolerance and the persecution and expulsion of heretics (*ibid.*, I, 236-37).

²⁰⁶ *Ibid.*, I, xvii, 92-103, 108. Isnard noted that as men were more prone to spend than to save (*ibid.*, I, 102), it was not necessary to stimulate luxury consumption.

²⁰⁷ *Ibid.*, I, 87-88 n. He cites Montesquieu and several Roman writers.

²⁰⁸ Isnard favored taxing individuals in proportion to their net wealth (*ibid.*, II, 3).

²⁰⁹ *Ibid.*, I, 84-87.

value of a man's labor per time period depended upon the value of what he produced in that period. His market rate of remuneration, however, depended upon the ratio of the supply of the type of labor performed by him to the demand for that labor; in general, it was equal to the "sum of the bids divided by the quantity" of the labor available. The rate tended to increase or decrease as the supply relative to the demand decreased or increased. The rate tended to be the same in all occupations in which the determinants of supply operated to establish the same ratios of supply to demand.²¹⁰ When the number of workers offering themselves was very great relative to the sum of the demands of employers for the workers' services, wages fell to a very low level. At the worst they sufficed only to provide the worker with a bare subsistence during the period of his employment, the money wage tending to fall as the price of subsistence fell, and to lag behind the price of subsistence when the latter rose.²¹¹ In the long run, since the wage that labor received governed its supply, the wage level was determined largely by what the workers believed they must earn before assuming the burdens attendant upon marriage and the replacement of themselves. It is inferable from his recognition that the population was growing, that he supposed the habitual real wage to be sufficient to induce some population growth. It is also inferable from the context of his discussion of population growth, and from his comments on the effects of the introduction of labor-saving methods, that he anticipated some increase in the habitual standard of life and the real wage of ordinary labor.²¹² He failed, however, to describe the mechanism whereby the level of living would be raised.

VII

The problem of poor relief in France did not give rise in the eighteenth century to an attack upon poor relief such as Malthus developed in his famous *Essay . . . on Population*. Problems

²¹⁰ *Ibid.*, I, sec. iv, pp. 28 ff., 45 ff.

²¹¹ *Ibid.*, I, 38, 45, 174, 201 ff.

²¹² When labor-saving techniques are introduced, he said, workers tend directly or indirectly to receive a portion of the resulting increase in "disposable wealth," at least until the increase in the supply of labor and its products pushes wages back to a subsistence level (*ibid.*, I, 45-46). He indicated also that nonagricultural industries could produce more than the subsistence of the workers therein engaged (*ibid.*, I, 39).

growing out of unemployment, indigence, mendicancy, and physical incapacity were always present in France, however. Countless *ordonnances*, decrees, and laws, designed to suppress mendicancy and unemployment and to regulate the alleviation of those in want, were put into effect by successive rulers and administrators.²¹³ As early as the first half of the eighteenth century there was much direct and indirect criticism of the fact that so many lived in extreme poverty;²¹⁴ some authors asserted that man had what amounted to a natural right to subsistence,²¹⁵ for they assumed poverty to be the product of bad institutions.²¹⁶ In the second half of the century both writers on general social questions and authors of works on indigence produced an increasing number of discussions of poverty and mendicancy, of their causes and cures. In 1777, in a contest conducted by the Académie de Châlons on means of destroying mendicity and rendering the unfortunate useful to the state, one hundred and sixteen submitted papers.²¹⁷ Between 1780 and 1791, at which time between 5 and 10 per cent of the population lived in extreme poverty,²¹⁸ thousands of pamphlets, brochures, and books on the causes and cures of indigence and mendicancy were published in France.²¹⁹

The reports of the intendants on the ubiquity of misery, coupled with the comments of the late seventeenth- and the eighteenth-century writers on social questions, produced an at-

²¹³ Léon Lallemand, *Histoire de la charité*, IV, 2 parts (Paris, 1910-12); P. Hubert-Valleroux, *La charité avant et depuis 1789 dans les campagnes de France* (Paris, 1890); C. Block, *L'assistance & l'état en France à la veille de la révolution (1764-1790)* (Paris, 1908).

²¹⁴ E.g., see the account of the travel literature, plays, novels, etc., in Lichtenberger, *op. cit.*, chap. ii.

²¹⁵ E.g., see citations in Lichtenberger, *op. cit.*, pp. 67-70, 78-81. The individual had a right to steal, if necessary, to secure subsistence, wrote Buffier in 1732 (cited by Lichtenberger, *op. cit.*, p. 68).

²¹⁶ Population pressure was not mentioned in connection with poverty. However, R. d'Aube (*Essai sur les principes du droit et de la morale*, Paris, 1743, p. 94) said that if the people of a nation were too numerous to obtain subsistence from its resources, the excess population could offer to submit to another sovereign, and if the latter refused, could seize some of the latter's resources. Cited by Lichtenberger, *op. cit.*, pp. 69-70.

²¹⁷ Block, *L'assistance*, pp. 211-14. Other societies held similar contests.

²¹⁸ See Block's account of the estimates (*ibid.*, pp. 4-6). The Abbé Baudeau had said in 1765 that one sixth of the population was poor. See his *Idées d'un citoyen sur les besoins, les droits et les devoirs des vrais pauvres* (Amsterdam-Paris, 1765), p. 185. Cf. with Vauban, above, p. 28.

²¹⁹ L. Lallemand, *La révolution et les pauvres* (Paris, 1898), pp. 36-43.

mosphere of sympathetic pity and benevolence toward the unfortunate.²²⁰ Although many specific immediate causes of misery and mendicancy were enumerated,²²¹ it came to be accepted in the second half of the eighteenth century that misery was the product of society and therefore must be repaired by society. The poor and the needy, many writers held, had a right to minimum necessary subsistence, the revolutionary doctrine of the right to assistance from the state deriving from this principle.²²² In response to this rising opinion, charitable institutions were brought more and more under state control in the quarter century preceding the Revolution, on the ground that the public good transcended the whims of private charitable establishments.²²³

Virtually no attention was given to prevention of population pressure as a means of curbing misery. Both prior to and in the eighteenth century recourse was had to public workhouses. In the eighteenth century it was often proposed that the poor and the foundlings be sent to the colonies,²²⁴ but the objection was

²²⁰ Block, *L'assistance*, pp. 142-49, 366-67, 376, 420.

²²¹ Among the specific causes frequently mentioned were economic inequality, concentration of landownership, absentee landownership, failure to cultivate all cultivatable land, lack of capital and efficiency in agriculture, unemployment, heavy taxes, war, inadequacies in the system of transportation and communication, and the bad administration of hospitals and other institutions for the relief of the unfortunate (see *ibid.*, pp. 14, 21-23, 152-53, 211-14, 380-81; Lallemand, *La révolution*, pp. 36-43, and *Histoire*, IV, esp. Part I, pp. 139-48).

²²² Block, *L'assistance*, pp. 148-49, 366-76, 397-98; Lichtenberger, *op. cit.*, pp. 302 n., 324-29, 347-55, 430-50. In 1790 the Comité of the Constituent Assembly declared that the "droit aux secours" must form the basis for all laws pertaining to relief. The Constitution in 1791, and the decrees of 1793, declared every citizen to have the "droit à sa subsistance" through labor if able-bodied, or through gratuity if disabled; for society was obligated to enable each to live (Lallemand, *La révolution*, p. 389). "It is amazing . . . how widespread" in 1788-92 "was the feeling of state obligation toward the unemployed and the needy in general," writes S. T. McCloy ("Charity Workshops During the French Revolution," *The South Atlantic Quarterly*, XXXV, 1936, 449). The authors of works on the relief of indigence generally supposed man as an isolated individual to be helpless; therefore they advocated either state aid or the establishment of mutual succor associations (Lichtenberger, *op. cit.*, pp. 326-27). See also J. Dubois, *R.H.S.*, IX (1921), 50-66.

²²³ Block, *L'assistance*, pp. 139-41. Prior to 1760 the state provided virtually no relief to the poor and private charity was powerless to aid them. Turgot's *ateliers de charité* and other measures afforded only a limited amount of succor, so great was the need.

²²⁴ *Ibid.*, pp. 4, 51, 119; Lallemand, *Histoire*, IV, Part I, pp. 189-94. C. L. Lokke's study (*France and the Colonial Question*, New York, 1932) of French opinion on colonies (1763-1801) does not suggest that poor relief was an important colonial objective.

not raised, as in the nineteenth century, that such emigration might provide only temporary relief. In general, after 1750, many asserted, as did Turgot, that the mendicancy-fostering hospital system should be replaced by a rational system of assistance designed to build up and preserve the individual's self-respect by enabling him to earn a living and protect himself against adversity.²²⁵ Many urged the removal of the causes of unemployment and indigence; the employment of foundlings in agriculture; the reduction of the number of holidays; the establishment of mutual insurance, savings, and benefit associations; and the provision of work *à domicile* for the able-bodied unemployed.²²⁶ At least one anonymous writer asserted that the individual had a right to enough subsistence to enable him to marry and rear children and that the maintenance of the state's population depended upon the recognition of this right.²²⁷ The right of needy fathers of large families to assistance was asserted by many.²²⁸ Although the imprudence of poor girls who married despite their financial inability to procreate and rear healthy children was sometimes condemned,²²⁹ and the great number of abandoned legitimate children was often attributed to the fertility of the poor,²³⁰ the later Malthusian view that poverty is due to imprudent marriage and the resulting population pressure apparently was not specifically recognized by any of the writers on poverty and mendicancy.²³¹

The state of fact and opinion with respect to indigence and relief led to the establishment, shortly after the French Revolution, of the famous Comité de Mendicité (1790-1791), which made

²²⁵ Block, *L'assistance*, pp. 179-210; also the report of the intendant, Isaac de Bacalan, reprinted in *R.H.S.*, I (1908), 367-425, esp. p. 375.

²²⁶ Block, *L'assistance*, pp. 152-56, 211-14, 366-67, 375-76, 420.

²²⁷ *Vœu de la dernière classe de peuple* (Paris, 1783), cited by Block in *L'assistance*, p. 4.

²²⁸ Block, *ibid.*, p. 437. In general, the eighteenth century witnessed a determined, but not wholly successful, effort to aid indigent children, and a great improvement in the treatment of foundlings and unmarried mothers (*ibid.*, pp. 118-20).

²²⁹ *Ibid.*, p. 23 and n.

²³⁰ *Ibid.*, p. 103 n. C. A. J. L. de Montlinot, a member of the Comité de Mendicité, and author of an essay on mendicity, was among those making this observation.

²³¹ The Jacobins, when considering Robespierre's "Declaration of the Rights of Man," rejected the proposition that "the natural rights of the sansculottes are to breed, to dress, and to feed" (D. de Hauranne, *Histoire du gouvernement parlementaire*, Paris, 1857, I, 277; see also Halévy, *Philosophic Radicalism*, p. 232).

a thorough inquiry into the factual and the theoretical aspects of indigence, poor relief, and care of the unfortunate. One encounters in the reports of the Comité, for which La Rochefoucauld-Liancourt (1747-1827) was chiefly responsible, not only a fairly rounded discussion of the relief problem, but also the rudiments of several types of wage theory and the assertion that France was overpopulated for the then state of her agriculture.²³²

The Comité rejected the notion that population growth is necessarily advantageous to a state, saying that such growth can be of benefit to a kingdom only on condition that opportunity for employment keeps pace with population growth. Such had not been the case in France. There, under the *ancien régime*, civil inequalities, the uneven distribution of landownership and of the tax burden, fiscal policies, "bad institutions," and so on, had checked the development of agriculture and the expansion of employment, and thus had contributed to the growth of indigence.²³³

If indigence is nothing other than disproportion between needs and the means of subsistence, . . . it is also disproportion between needs and the means of employment, and . . . disproportion between the population of a State and the means that this State can employ, or that it does employ, to alleviate it. Thus, a State which has more men to maintain than work to set in motion [their] unemployed hands [bras], condemns them [the unemployed] to misery, and, as a natural consequence, imposes upon those who do labor the assistance which, in one manner or another, it is necessary to give to indigence, and which more or less burdens all members of society who are not indigent; finally, through a consequence as positive, though more removed, the State whose population is in greatest disproportion with its means of employment is that [state] which, to the internal ill-being that it experiences, adds, in a manner more extended, the political evil of enriching at its expense the neighboring States, since it is obliged to obtain from them the provisions that its own labor is not able to furnish.

²³² See *Procès-verbaux et rapports du Comité de mendicité de la constituante 1790-1791*, with annotations by C. Block and A. Tuetey (Paris, 1911). For the life and opinions of La Rochefoucauld-Liancourt see F. Dreyfus, *La Rochefoucauld-Liancourt* (Paris, 1903).

²³³ *Ibid.*, pp. 311-15, 384-85. The quotations that follow are taken from pp. 311-12.

It is thus that, despite the assertions, repeated without cessation for twenty years, of all the political writers who place the prosperity of an empire in its very great population, an excessive population, without much employment and without abundant productions, can be, on the contrary, a devouring surcharge upon the state; for it then becomes necessary that this excessive population share the livings of those who, without it, might have found a sufficient subsistence; it becomes necessary that the same amount of work be divided among a larger number of hands; it becomes necessary finally for the price of labor to fall in consequence of the greater competition among workers, whence there must result complete indigence for those who cannot find work, and inadequate subsistence even for those to whom it is not refused.

Therefore, in order that the augmentation of population assure the welfare of a State, it is necessary that it progress as employment increases, and France does not find itself in this proportion today.

The Comité went on to say that the laws and ordinances of France were not suited to correct the prevailing evils. Some of the laws of France (e.g., that concerning the militia²³⁴) were

encouraging marriage; none was encouraging work in its veritable source; none was destroying either the ordonnances, or the laws of finance, or the *mœurs*, or the prejudices of the country, which . . . were giving to capital a direction other than that which would augment employment. It is thus that the kingdom most capable, in consequence of its extent, of the fertility and variety of its soil, [and] of the activity and industry of its inhabitants, of supporting to its advantage a population much more numerous than that which at present burdens it, [and] which should have been able as a result to increase its strength and resources infinitely, today finds, in this great means to wealth, a surcharge which spreads misery or trouble through a mass of four or five millions.

The disproportion between the population of France and the employment that it provides is then the primary and chief cause of indigence; and, to particularise this truth even more, the state of agriculture in France is the cause of this poverty; for agriculture is the primary source of wealth in a great kingdom, by virtue of the hands that it employs, the harvests that it furnishes, and the aliment that it supplies to manufactures and to commerce.

²³⁴ Since the militia was recruited from celibates, potential recruits married to escape service, it was believed (*ibid.*, p. 312 n.).

Although the Comité believed that appropriate reforms would reduce the relative amount of indigence, it concluded that the state always would have to make some provision for the needy; for so long as many persons remained propertyless, and many causes of poverty remained ineradicable, there would be needy citizens. The Comité carefully circumscribed the right of the needy to subsistence, however, for it apparently considered property rights and economic liberty to be as essential to the general welfare as the right to subsistence. The Comité limited the claim of unemployables to the indispensable minimum of food and shelter; it specified that the able-bodied must work, but refused to endow the able-bodied with an unlimited "droit au travail," probably because it recognized that such an unlimited right to work might be converted into an uncircumscribed right to assistance on the part of persons without employment. The Comité did not advance Malthusian demographic arguments against the "droit au travail" (i.e., the positive right to have work found for one), however, as did many nineteenth-century French economists.²³⁵

The Comité, in the course of its discussion of the means proposed to alleviate indigence, did not consider the possibility of encouraging the limitation of population growth, apparently because such a suggestion did not occur to any members of the Comité and was not embodied in any work or proposal examined by the Comité. In general, it emphasized the need of augmenting the supply of capital and resources in actual use, and of preventing unemployment. The Comité rejected all proposals to impose a special tax upon property, the proceeds to be used for the support of the poor, as in England; for it believed that sufficient funds already were available in France for the support of the poor, and it inferred from English and foreign experience that a poor law such as the one in effect in England tended to increase the number of poor, to foster indolence and improvidence, to

²³⁵ *Ibid.*, pp. 311-12, 315-16, 384, 427-33. For the nineteenth-century view see my "French Population Theory Since 1800," *Journal of Political Economy*, XLIV (1936), esp. pp. 585-98. On the meaning of the "droit au travail," see D. G. Ritchie, *Natural Rights* (London, 1903), pp. 229-31. G. Schelle states (*Du Pont . . .*, p. 62) that both the "droit au travail" and Raynal's "droit de vivre" were easily derivable from Quesnay's "le droit naturel de l'homme est le droit qui l'homme a de faire ce que lui est avantageux." Ritchie apparently does not accept such an interpretation.

make for a cumulative waste of funds, and to burden unequally and unduly the property-owning and nonindigent portions of the population. "The example of England is a great lesson." Despite its vigorous condemnation of the English system of poor relief, the Comité did not specifically educe from English experience (as did Malthus later), or from French experience, that poor relief stimulated marriage and natural increase in the needy classes and thus aggravated the very situation it was designed to correct.²³⁶ The Comité advocated that the fifteen to twenty million arpents of land then not being properly utilized be fitted for cultivation by indigent unemployed able-bodied persons; that more funds be employed in developing and exploiting agriculture; and that savings and insurance institutions be established to enable the wage earners to save and accumulate funds against a rainy day.²³⁷

No explicit wage theory appears in the Comité's reports. Although the Comité at times virtually supposed the fund of work to be fixed in quantity and completely independent of the size of the population,²³⁸ it held, in general, that the number of jobs depended upon the amount of money being invested in enterprise, particularly in agricultural enterprise, and in improvements in land.

More funds employed will give more work, therefore [there will be] less poor; a larger mass of work, employing more hands, will diminish

²³⁶ *Procès-verbaux*, pp. 323, 368, 385-88, 430, 437-38; also pp. 68-74, 317, 466, 474, 478-80, 490, 543-44. The Comité was familiar with the views of A. Smith, A. Young, R. Potter, and R. Townsend on the English poor relief situation. Moreover, Rochefoucauld-Liancourt had traveled extensively in England and was somewhat familiar with the English system and its effects. The Comité approved of aid for needy fathers of large families and for foundlings, and of measures to reduce celibacy and thus prevent the birth of foundlings (*ibid.*, pp. 404-06, 434). Arthur Young expressed surprise that the Comité adopted the English principle "that the poor have a right to pecuniary assistance from the state" (*Travels in France*, II, 319). France was overpopulated, unable to employ and feed many of her people; with "five or six millions less of inhabitants . . . she would be much more powerful and . . . flourishing" (*ibid.*, pp. 379-81, 384-85). Therefore "no institutions" to facilitate immigration, stimulate marriage by relieving the "burthen" of children "upon parents," and thus "encourage population can take place there at present without entailing misery upon the bulk of the nation" (*ibid.*, pp. 322-25, 384-85).

²³⁷ *Procès-verbaux*, pp. 314, 321, 388, 454-64. The Comité's views on "prevoyance" and saving were influenced by Condorcet's proposals in his *Essai sur la constitution et les fonctions des assemblées provinciales* and probably by those of F. de Villeneuve. See *Procès-verbaux*, pp. 454-64, for tables on interest and capital growth

²³⁸ See quotations above, from pp. 311-12.

competition among workers, [and] therefore [permit] a wage more suitable for the worker.

His condition will improve also in consequence of the mutual need that men have of one another, in countries where places are the effect of choice and where, in consequence, the wealthy have an interest in elevating wages.²³⁹

Apparently the Comité did not suppose that wages could not rise above a subsistence level, or above some previously attained level, for it asserted that the Revolution had elevated wages, and that wages should be above the subsistence level so that a worker could earn enough to save against his needs in old age and in times of occasional unemployment; it did not note the possible relationships between living standards, population growth, and wage levels. "Perhaps the augmentation of wages which must, even as has been said, result, for the workers, from the new order of things, will give them the means to make in times of abundance small economies which they should find advantageous to the end of their lives."²⁴⁰

VIII

Among the French writers who remain to be included in this chapter are J. J. L. Graslin (1727-1790), critic of the physiocrats; J. Accarias de Serionne (1709-1792), conservative lawyer and author of many books; C. H. de Bruny, a defender of Colbert; and Nicholas F. Canard, who wrote his treatise at the end of the century. Graslin, collector of taxes at Nantes, virtually ignored the population question. In his principal work²⁴¹ he criticized the physiocratic conceptions of wealth, production, and taxation, advocating as preferable to the physiocratic *impôt unique* what amounted to a kind of progressive tax on income.²⁴² He denied the physiocratic assertion that a tax on provisions, or an augmentation of the price of grain, would necessarily be accom-

²³⁹ *Ibid.*, p. 314.

²⁴⁰ *Ibid.*, p. 321; also p. 432.

²⁴¹ *Essai analytique sur la richesse et sur l'impôt* (London, 1767). Graslin's views are summarized in J. Desmars, *Un précurseur d'A. Smith en France, J. J. L. Graslin* (Paris, 1900); see also A. Dubois' introduction to the 1910 (Paris) edition of Graslin's *Essai*.

²⁴² *Essai*, pp. 283 ff.; Desmars, *op. cit.*, pp. 127-69. Graslin, though a bullionist and an advocate of free trade in grain, looked upon the income received by owners of property as essentially unearned income (*Essai*, Part I).

panied by an increase in money wages. For, reasoning in consistence with his thesis that the value of anything is governed by its scarcity and the need for it,²⁴³ he said that money wages would not increase unless the number of workers was reduced. Accordingly, in so far as workers produced a net product and received a wage in excess of their subsistence and other expenses, they could pay a tax on foodstuffs or higher prices for provisions, and yet suffer no decrease in number. Moreover, the proprietors would not offer the worker a higher money wage, even though their revenues permitted such an increase.²⁴⁴ The exportation of grain would tend to favor an increase in money and real wages, inasmuch as workers would be diverted into the carrying trade, with the result that their supply in agriculture and industry would be reduced.²⁴⁵ He recognized that returns tend to diminish at the extensive margin, saying that a tax on gross agricultural yield drove the inferior lands out of use,²⁴⁶ but he did not develop the implications of this tendency for demography.²⁴⁷

De Serionne, who discussed many aspects of commerce in his major treatise,²⁴⁸ denied the allegation that the population of

²⁴³ *Essai*, pp. 132-33; Desmars, *op. cit.*, pp. 65-70. Graslin supposed that well-being depended upon the extent to which wants are satisfied, and that the mass of wealth remains constant, inasmuch as its marginal importance falls at the same rate as its physical supply increases (*ibid.*, pp. 73-75, 79).

²⁴⁴ *Essai*, pp. 132-33, 247-56. "The wage of the worker, otherwise the relative value of his labor, is always in proportion to the degree of need to which it is applicable, and of its rarity proportionately to the extent of the need. Wages can rise then only in the case in which the tax on workers has diminished their number. . . . The augmentation of the wages of workers is not at the expense of the proprietors of land alone; for these proprietors are not the only ones who have need of the labor of workers" (*ibid.*, p. 247).

²⁴⁵ *Essai*, pp. 134-37, 147. Graslin recognized, however, that three fourths of the workers earned little if anything more than bare subsistence (Desmars, *op. cit.*, pp. 194-95). Graslin shared the view of those who believed the exportation of manufactured products to be favorable to population growth in France. See Weulersse, II, 276, 405, 648; Desmars, *op. cit.*, pp. 240-41. On the basis of his theory of value and his notion of economic circulation, Graslin criticized the theories of *luxé* held by Mirabeau and Forbonnais. Graslin noted that luxury consumption did not increase employment; that *luxé* was enjoyed at the expense of the poor (*Essai*, pp. 196-214).

²⁴⁶ Desmars, *op. cit.*, pp. 157-58; *Essai*, pp. 259 ff.

²⁴⁷ The physiocratic views on taxation and the police of the grain trade were criticized by many writers who had little to say on population and wage theory as such, and who are therefore ignored in this study. For summaries of certain of these antiphiocratic views see works of Lichtenberger and Weulersse.

²⁴⁸ *Les intérêts des nations de l'Europe développés relativement au commerce* (4 vols.; Leyden, 1767). De Serionne believed that evil would result if men were

France had declined from twenty-five million to only sixteen to eighteen million, argued that commerce was favorable to population growth, and rejected as invalid the physiocratic theory of production and taxation.

He founded his thesis that the population of France had not diminished upon the theory that population proportions itself to subsistence.

Nature gives the lie [to such conjectures of depopulation] by her constant & invariable way of proceeding which is to nourish always the same number of men with the same quantity of grain from the same extent of cultivated lands.²⁴⁹

Nature is invariable in her operations, unless some foreign cause interrupts their course. The same number of men that she has put in a country at a given time, will be there always, because there will always be for them the same territory & the same quantity of subsistence.²⁵⁰

He pointed to the "striking" fact that the population of many villages had remained constant for centuries: "One could say that nature counts them [people] one by one" in order to support virtually the same number of people in each place relative to the subsistence "that she renews without cessation."²⁵¹ One could conclude, therefore, that since man consumed "neither more nor less grain" in the eighteenth than in earlier centuries, unless the amount of land under cultivation had been reduced, the population of France had not diminished. Actually, the land under cultivation in France had increased (he pointed to the fear of a shortage of wood); therefore, the population must be greater, other things equal.²⁵² It would be easy to prove that the population of France had grown from twenty to twenty-four million, inasmuch as France contained four times as much land as was

allowed to think and write freely. He was familiar with some of the writings of Forbonnais, Vauban, Mirabeau, Petty, Davenant, and some of the English and French works on luxury and the care of the poor. See Chapter VI, n. 103, above.

²⁴⁹ *Ibid.*, III, 310.

²⁵⁰ *Ibid.*, III, 306.

²⁵¹ *Ibid.*, III, 309-10. Elsewhere (*ibid.*, III, 181-83) he said that, with the exception of nonindustrial and underpeopled countries like Russia, the movement of population constituted the best index of the growth of a country in wealth and power; for the number of workers and the amount of industry and revenue increased in the same general proportion.

²⁵² *Ibid.*, III, 307-10.

needed (allowing for land in fallow) to support twenty million.²⁵³ One could reason in a similar fashion that the population of other European countries had not declined.²⁵⁴

To clinch his thesis, De Serionne denied that checks to population were more operative than formerly; or that there had been "great mortalities," or "almost universal emigrations," or "general devastations," not reparable in a few years.²⁵⁵ Losses caused by war, epidemics, and heavy taxation had always been made up within a decade of peace. Propagation and the coming of immigrants had long since made good the emigration of "the Protestants" (i.e., Huguenots). Ecclesiastical celibacy, while always a check to population growth, was less pronounced than formerly and could not therefore be advanced in support of the allegation of depopulation. The celibacy due to service in the standing army was less of a check than formerly, inasmuch as the soldiers could marry upon completing a ten-year term of service. Shipping was no check, as sailors married and kept up their numbers. For reasons noted below, luxury, commerce, and colonial expansion were not effective checks.²⁵⁶ Although he described "misery and indigence" as the "plague most destructive of population," and indicated that a badly administered hospital and poor relief system was unfavorable,²⁵⁷ he apparently considered these checks insufficiently operative to have caused a decrease in numbers. So great was the reservoir of people in France whence natural increase could stream that none of the factors mentioned could have retarded population growth noticeably.²⁵⁸ Moreover, in every European country but Spain,²⁵⁹ conditions were more favorable to population growth than formerly. There was more comfort; the system of "police" was better; transportation and communication had improved; international relations

²⁵³ *Ibid.*, III, 307.

²⁵⁵ *Ibid.*

²⁵⁷ *Ibid.*, III, 151-55, 178-79.

²⁵⁴ *Ibid.*

²⁵⁶ *Ibid.*, III, 310-13, also 178-79.

²⁵⁸ *Ibid.*, III, 311.

²⁵⁹ In Spain heavy taxation had produced rural depopulation (*ibid.*, III, 178-79). The diminution of Spain's population was ascribable to the expulsion of the Jews and the Moors, and to the burdensomeness of the tax system; it was not attributable to Spanish colonial and commercial expansion, commerce having been favorable to Spanish population growth (*ibid.*, III, 316). Writers always cited Spain as a proof of depopulation, he said, because Spain was the only country which had suffered depopulation (*ibid.*, III, 314, 316).

were more friendly; wars were less destructive; and the *mœurs* were sweeter. Therefore population must have increased.²⁶⁰

De Serionne did not consider luxury to be unfavorable to population growth. It was true that love of *luxe* caused "a great number of persons" to remain celibate. Nevertheless, luxury gave employment to an "infinity" of persons and enabled them to marry and procreate. Luxury increased the demand for the products of agriculture and manufacturing; moreover, it animated man, who by nature was disinclined to work hard, to be industrious and productive. Luxury attracted relatively few persons from agriculture into domestic service. In general, were luxury to be curtailed through legislation, population would diminish appreciably.²⁶¹

De Serionne was not content to deny that commerce had depeopled France and Europe; he contended that it had positively fostered population growth. Population grows when "comfort" and "happiness" increase; it increases in proportion as industry and agriculture flourish individually or in combination. Commerce is the agent which "animates" agriculture and industry, and "consequently the principle of the largest population."²⁶² Commerce multiplied in a thousand ways the opportunities to earn a livelihood; it augmented the supply of subsistence and thus increased the number of marriages and the rate of population growth.²⁶³

It followed as a corollary that the development of the American colonies had augmented the population of Europe. The discovery of America had stimulated European agriculture and industry; it had multiplied employments in Europe and had swelled the supply of subsistence there. Therefore colonial commerce had fostered population growth in Europe. Moreover, had there been no colonial development, the population that had migrated to the colonies and multiplied there either would not

²⁶⁰ *Ibid.*, III, 313-14.

²⁶¹ *Ibid.*, III, 155-71, 313. Elsewhere (II, 93) he said that borrowing and credit creation were unfavorable to population growth; that *rentiers* lived on the fruits of the producing population.

²⁶² *Ibid.*, III, 178-79, 303-04.

²⁶³ *Ibid.*, III, 315, 317-18; also II, 273-75. There will be a marriage wherever two persons "can live commodiously. . . . Nature impels enough [in this respect] when she is not stopped by the difficulty of subsistence. Such is the great and primary principle of population" (*ibid.*, III, 317).

have been born or would not have survived long; for this emigrating population came from the propertyless class who would have lacked the means on which to marry and multiply.²⁶⁴

In reply to Mirabeau's formulation of Quesnay's doctrine that only the owners of land received a net product and were able to pay taxes, De Serionne said that the "wages of labor always exceeds needs," the excess above needs constituting the source of the comfort and pleasure and fortune of man. A single laborer produces enough to subsist two or three additional persons. Any man, regardless of his "state" in life, is able, if he lives in accordance with his "state," to earn more than his subsistence and to accumulate some savings. This proposition is valid even for those who have only their hands; it is far more true of those who are aided by equipment and intelligence.²⁶⁵ In short, reasoned De Serionne, a man's ability to pay taxes is not determined by whether or not he is a landed proprietor, as the physiocrats claimed, but by his "comfort and relative well-being." Were the state not to tax labor and its products, it would neglect an important source of revenue and fail to tax justly and in accordance with the capacity of its citizenry to pay taxes.²⁶⁶ The state should adhere to no single theory in taxation, he said, but should tax in such fashion as to favor progress in the arts, in agriculture and industry, and in population.²⁶⁷

Traces of a standard of living theory of wages appear in De Serionne's few references to wages. A state should not tax necessities if such a tax operates to increase the cost of living and (therefore) money wages and thus to disadvantage those of the nation's manufacturers which are exposed to competition.²⁶⁸ A state should tax even the propertyless workers because the obligation to pay taxes tends to excite workers to be more industrious.²⁶⁹ Great cities are less favorable to manufacturing than

²⁶⁴ *Ibid.*, III, 180, 316-19. He recognized, however, that as America became self-sufficient it might break away from Europe and even become a commercial competitor of Europe (*ibid.*, III, 318-19).

²⁶⁵ *Ibid.*, III, 185-92. "Labor" and the "gifts of nature" are the sources of economic goods (p. 185). The value which an artisan adds to raw materials is "a fund as real" as the price a cultivator receives for raw materials (pp. 190-91).

²⁶⁶ *Ibid.*, III, 187, 193, 195-96.

²⁶⁷ *Ibid.*, III, 206-08.

²⁶⁸ *Ibid.*, III, 204.

²⁶⁹ *Ibid.*, III, 196. Presumably such taxes must not be too high (p. 178).

smaller communities, for in large cities money wages are higher, inasmuch as provisions cost more there, and the workers, coming to feel the need of superfluities, require more pay to satisfy this need.²⁷⁰ In general, judging from some of his remarks relative to population, he did not believe that population pressure would necessarily develop and depress wages to a bare subsistence level.

De Bruny reasoned that the principal impetus to agriculture and population growth came from the expansion of manufactures.²⁷¹ Agriculture was the ultimate source of the nation's subsistence. The expansion of manufacturing, however, served to stimulate agriculture, augment "la somme du travail," and thus favor population growth. Man was an intelligent creature whose wants were infinite. Landed proprietors in particular desired a variety of manufactured products. Accordingly, as manufacturing developed and gave birth to an ever greater variety of goods that appealed to man's desires, the effective demand for agricultural products expanded, and proprietors were motivated to extend and improve agriculture; as a result, numbers grew.²⁷²

Nicholas F. Canard (1750-1833), in a sense the last French economist of the eighteenth century,²⁷³ devoted little attention to population, his *Principes* growing out of his efforts to determine whether or not taxes ultimately fall upon the landowner. He divided the "labor" of the community into two categories: (1) that necessary for the support of the population; (2) the "superfluous" portion available after the basic wants of the community had been provided. "Superfluous labor" made possible the improvement of land, the acquisition of skills, and investment

²⁷⁰ *Ibid.*, III, 120-21. He conceived of a natural "equilibrium . . . between all orders of a state" (*ibid.*, III, 117, 121), but did not expand this concept. Competition and rivalry among workers and among producers were essential to progress in the arts and to the maintenance of an appropriate balance among occupations (*ibid.*, III, 116-21). Although De Serionne favored certain means of encouraging manufactures (*ibid.*, III, 130-32), he opposed all marked interference with freedom of trade (*ibid.*, III, 48-66). He advocated the introduction of labor-saving machinery, saying that it did not curtail employment, but augmented consumption and favored population growth (*ibid.*, III, 121-25).

²⁷¹ *Examen du ministère de M. Colbert* (Paris, 1774).

²⁷² *Ibid.*, pp. 47-59.

²⁷³ Canard's *Principes d'économie politique* was published in Paris in 1801. Canard, a professor of mathematics, and a precursor of the mathematical school of economics, was self-educated in economics. His work is discussed by E. Allix, *R.H.S.*, VIII (1920), 38-67; by U. Ricci, *R.d.e.p.*, LIII (1939), 820-27.

in mobile capital; it was the source of land rent, of wages in excess of subsistence, and of interest on mobile capital. The existence of "superfluous labor" made possible not only capital accumulation and the production of luxuries, but also progress in the arts and civilization.²⁷⁴

Wages varied by occupation and apparently through time, according to Canard. At the lowest level they provided only a miserable existence; at higher levels they also permitted the purchase of some superfluities. Skilled workers necessarily tended to receive in excess of subsistence at least enough to compensate them for the cost of acquiring their skills; otherwise they would have no incentive to acquire skills.²⁷⁵

Although Canard noted that returns tend to diminish at the intensive and extensive margins, he did not relate this principle to the population problem except to observe that war and hunger limited population growth.²⁷⁶ There were no-rent trades which men stood ready to abandon at the first unfavorable turn in events, and no-rent land which yielded just enough to justify its cultivation. Canard generalized as follows: "The more the sources of rent are ameliorated, the less are they susceptible of receiving new ameliorations, and the last [ameliorations] are always more expensive relative to the increase of product that they yield."²⁷⁷

²⁷⁴ *Principes*, p. 4.

²⁷⁵ *Ibid.*, p. 43.

²⁷⁶ *Ibid.*, p. 19. Canard knew Smith's work.

²⁷⁷ Bye (*op. cit.*, pp. 79, 109-11), who quotes Canard's formulation of the law of returns, indicates that J. B. Say gave little attention to this law because he was influenced by Smith's treatment of rent, rather than by Canard, to whom Say refers when treating population.

CHAPTER VIII

THE EXTREME ANTIPHYSIOCRATS

THE MORE violent critics of the doctrines and philosophy of the physiocrats fall into two main categories: (1) the pre-Marxians, who emphasized the exploitative aspects of the existing French economy; (2) the primitivists and other anticapitalistic writers, who believed broad social reforms to be prerequisite to the improvement of the lot of the masses. Necker and Linguet, the most influential and representative of the former group of writers, asserted that under conditions such as then existed in France employers were able to exploit the workers and did exploit them, and that the common man could not obtain justice unless the state protected him, or he became a property owner; both men therefore may be viewed as exponents of both governmental protection of labor and wide diffusion of ownership. Necker urged that since the private and the public interest did not usually coincide¹ and could not be made to coincide in a laissez-faire economy, and since the wealthy tended to exploit the propertyless, state intervention was necessary to assure justice to all. Linguet went beyond Necker in his emphasis upon the exploitative character of contemporary society, but offered no specific solution. Both men, and especially Linguet, emphasized the dependence of economic and political liberty upon the distribution of the ownership of property. Anticapitalistic reformers (e.g., Mably, Morelly, and Rousseau), on the contrary, failed to recognize adequately the relation between liberty and the distribution of ownership, or the extent to which then existing obstacles to social reform were economic in character. Therefore, they were more confident that the economic lot of the masses could be improved with

¹ The lack of identity of public and private interests is clearly described by Necker in his *Of the Importance of Religious Opinions* (Philadelphia, 1791), a translation of his *De l'importance des opinions religieuses* (London, 1788). See *Religious Opinions*, pp. 19, 25, 27, 40. Necker (1732-1804) was minister of finance (1777-81, 1788-90). According to C. Grünberg, Anton Menger (1841-1906) was one of the few nineteenth-century writers to develop with the vigor of Linguet and Necker a "force" theory of distribution (*R.H.S.*, II, 1909, 143).

ease, and made proposals which, while more optimistic in character than those of Linguet and Necker, were not founded upon a full comprehension of the interrelation of political, economic, and social facts.

I

While certain of Necker's opinions were mercantilistic in character, they were tempered by humanitarianism and shaped by his belief in the necessity of state intervention for the protection of the underprivileged.² To the usual mercantilist pillar of the state, "power"—founded, Necker believed, upon "population" and "wealth" (i.e., precious metals and goods not required for the support of numbers)—he added a second, "happiness."³ He added, further, that the sovereign was duty-bound to preserve harmony among the classes, to insure justice and happiness to all groups, and to employ every possible means to promote "the multiplication of men . . . , the increase of their felicity, & the perfection of their intelligence."⁴

Necker clearly recognized that population growth, if too great, might run counter to "happiness," but he minimized the conflict between these two ends, in part perhaps because he believed that wealth might accumulate at least as rapidly as population and thus tend to prevent any decrease in felicity. In his earlier work, however, he set down contradictory propositions relative to the effect of population growth upon happiness and welfare. On the one hand, he indicated both that population tended to increase despite obstacles, and that such growth often tended to benefit the proprietary classes, but not the working classes; wherefore population growth might be accompanied by an intensification of interclass disharmony. On the other hand,

² Necker's defense of interventionism was directed at the physiocrats and the advocates of complete liberty in the grain trade, who, in his opinion, built their defense of laissez faire upon premises not supported in fact. See his *Éloge de Colbert* (1773) and his *Réponse au mémoire de M. l'abbé Morellet sur la Compagnie des Indes* (1769) in his collected works. His main works were *Sur la législation et le commerce des grains* (1775) and *De l'administration des finances de la France* (1784). *Sur la législation* was a criticism of the opinions of Turgot and the physiocrats.

³ *Législation* (*Œuvres*, V [Paris, 1785]), 12-20. To the physiocratic statement that foreign mercenaries could readily be hired by a state, Necker replied that this took time, since the consent of the foreign state must be obtained.

⁴ *Ibid.*, pp. 313-14, 329-31; *L'administration* (Paris, 1785 ed.), I, 206.

he asserted that population growth occurred only when harmony among the classes prevailed; whence it was "the surest gauge of the union of felicity and strength."⁵ He suggested further that population growth would not diminish "happiness" inasmuch as "happiness" was dependent not upon the magnitude of income, or upon variety in consumption and multiplicity in pleasure, but upon ability to gratify simple wants and to feel hope and courage. Presumably, Necker referred to both individual and aggregate happiness; yet he merely said that two thousand persons with simple necessities "combined a greater quantity of happiness" than one thousand better clad and more delicately nourished.⁶ Later he concluded that population growth was not necessarily a measure and a source of felicity and strength; for the population had continued to grow despite the existence of widespread misery; and, as a result of the overloading of the population with unproductive young persons (one fourth of whom would die before completing the third year), average economic productivity had declined.⁷

In his treatment of the capacity of man to multiply up to and even beyond the limits of subsistence, Necker out-Malthused Malthus, thereby contradicting the view that population growth was evidence of felicity.

The impetuous attractions that nature has put between the sexes, & the love that she inspires in them for the fruits of their union, are the cause of the multiplication of men upon the earth; these sentiments dominate the poor like the rich; no law can be opposed thereto, & if it were possible, it would be barbarous. Every sensible being likes better to share bread with his helpmate and his children than to live alone upon more varied foods; it is thus that population spreads itself, & in spreading itself, it increases in an inevitable manner the number of miserable.⁸

So strong was this proclivity to multiply, this "fecund beneficence" which enabled the species to "triumph over errors of administration & political iniquities," this pressure of "the pleasures of the senses," that even persons living in poverty tended to procreate as many or nearly as many children as did those who

⁵ *Législation*, p. 14.

⁷ *L'administration*, I, 204-06.

⁶ *Ibid.*, p. 27.

⁸ *Législation*, pp. 25-26.

lived in comfort; and men multiplied despite the many obstacles which lay in the way of population growth: war; iniquity; heavy taxes; propensity to celibacy, especially in the cities; enfeeblement of the human organism; poverty and conditions conducive to infant mortality; and depravity of the customs.⁹

While Necker held that the population of a country was able to multiply and perpetuate itself "only in proportion to the subsistence produced by the same country," he did not find the main immediate check to population growth in the lack of subsistence, but in "the plagues of Heaven, the errors & the destructive passions [which] almost always arrest the natural progress of population"; in short, in the checks, both positive and preventive, which tended to operate before population surpassed "the sum of subsistence," thereafter to be restrained by "suffering and mortality."¹⁰

Concerning the future of population growth and pressure Necker was pessimistic on the whole; some of his anticipations were vague, and some were contradictory. He referred occasionally to the beneficence of nature and to the improbability of institutions, but he did not consistently and explicitly assert the existence of a meliorative trend in social evolution. He several times suggested the possibility of elevating the wage level, but he apparently anticipated no significant rise in the standard of living, and no correlated diminution in the impulse to propagate; generally, when he discussed wages, he supposed the earnings of most workers to provide little if anything beyond subsistence, and he did not suggest that the quantity of subsistence necessary to induce family replacement would increase. He remarked that if the tax burden were more evenly distributed, a large part of the population would no longer continue to see in an increase of family a cause "of trouble and anxiety" and therefore remain strangers to the "most sweet sentiments of nature."¹¹ He even suggested that certain of the preventive checks, then traceable to want, might become serious, namely—"the corruption of the *mœurs* in rural districts, the fear of being a father, and the unnatural abandonment of children in places of refuge, where death

⁹ *L'administration*, I, 198-204.

¹⁰ *Législation*, p. 27, also pp. 72-73.

¹¹ *L'administration*, I, 205.

makes great ravages."¹² On the balance, however, he believed that the sexual urge would tend to triumph over positive and preventive checks so long as agriculture and industry did not retrogress. Hence he did not consider depopulation likely; rather he implied that despite improvements in agriculture and industry the tendency of numbers to press upon the means of employment and subsistence would persist.

Necker supposed, much as did Cantillon, that population growth in general and the happiness of the masses in particular were conditioned by the consumption standards of the wealthy and the proprietors, standards which expanded with the intensification of economic inequality and the consequent growth of the income of these two overlapping classes. Given a community of small properties, households would be comparatively self-sufficient, each family enjoying an adequacy of simple commodities, and few or no domestic or foreign luxuries; but given great inequality, the few would enjoy, at the expense of the poor, large incomes which could be exchanged for foreign and domestic luxuries.¹³ In other words, the uses to which factors of production were put, and therefore the kinds of things produced and the volume of subsistence raised each year, depended in part upon the living standards of the wealthy and the proprietors of land, these standards depending in turn upon the degree of inequality in property ownership. In proportion as land was used for parks, decorative gardens, and the like, or to support horses employed in a nonproductive capacity (e.g., military, luxury), the supply of subsistence, and therefore the size of the population, tended to be smaller.¹⁴ Necker did not infer, however, that an increase in the living standards of the proprietary classes would, through example, inspire the masses to desire a higher standard of living and thereby act as a check upon their growth; or that a redistribution of land would permanently relieve population pressure.

¹² *Ibid.*, I, 198-204. He estimated the annual number of foundlings at forty thousand (*ibid.*, III, 167).

¹³ "It is the miserable lot of the great majority of men reduced to the most urgent necessity which places at the disposal of the wealthy a superabundance of goods of every sort that they desire to convert into money, which is effected through commerce with other nations. These great inequalities, even though inevitable, are not the less painful to humanity" (*Législation*, Part I, chap. v).

¹⁴ *L'administration*, I, 24-25, 201-03; III, 94.

Although Necker advocated no measures to stimulate or to check population growth directly,¹⁵ or to regulate habits of consumption, he did support policies which, in his opinion, would encourage multiplication. Thus, he opposed the free importation of foreign manufactures, in part because such imports allegedly checked employment and population growth in France, in part because foreign nations refused to import French goods freely.¹⁶ He favored promoting manufactures and aiding agriculture ("the primary source of population") through the establishment of trades, arts, manufactories, etc., designed to produce goods pleasing to proprietors and therefore suited to activate them to expand agricultural output and population capacity.¹⁷ He did not think the government could or should abolish inequality; but he indicated that the state could reduce it and the luxurious consumption resulting therefrom, apportion the tax burden more equitably, and, by establishing democratic conditions such as prevailed in England, bring about a better distribution of the national income and a higher wage level.¹⁸ He looked upon luxury production as a concomitant of scientific progress and as a force that served to increase the exchange value of agricultural products and the felicity of proprietors, thus inspiring them to improve agriculture; nonetheless, he favored moderation in the development of luxury manufacture.¹⁹ Finally, he approved state regulation of the grain trade and protection of the masses against exploitation.

Necker's defense of governmental supervision of internal and foreign trade in grain against the attacks of those (physiocrats, Turgot, and others) who advocated the removal of all restrictions on such commerce is attributable to his conception of the comparative bargaining power of employers and workers, and of grain distributors and the purchasing masses. For Necker developed, besides the ordinary subsistence and scarcity theories of wage determination, a third or "force" theory in which weight was given to the amount of "exploitation" permitted by existing laws

¹⁵ He did not advocate emigration, even though he believed that it might diminish population pressure and elevate wages (*Législation*, pp. 26, 310). Laws suited to check population growth, were they feasible, would be "barbarous" (*ibid.*, p. 26).

¹⁶ *Législation*, pp. 103, 107.

¹⁷ *Ibid.*, pp. 28, 40-41.

¹⁸ *Ibid.*, pp. 34-41, 310; *L'administration*, I, 205; III, 97, 100, 104-08.

¹⁹ *Ibid.*, III, 90-91; *Législation*, pp. 37-40.

and institutions; and from this theory he proceeded logically to a recognition of the "class struggle" and to advocacy of governmental intervention to insure "justice" for the working masses.

Wages, Necker observed, varied by class, ranging from a maximum in employments requiring talented workers through an intermediate level in industry to a minimum in agriculture.²⁰ Rare or talented workers, apparently because of the scarcity of their services, received a wage "infinitely superior to the sum of their outlays [for] . . . consumption," whereas "common and rough labor" received a wage that sufficed only to provide the worker with necessities.²¹ Moreover, the money wages received by common labor varied, ranging, according to the degree of exploitation of workers by employers, from a sum sufficient only to provide the individual worker with "the most scanty necessities of life" to a sum sufficient to provide a worker and a family of more than replacement size with food, clothing, shelter, a reserve against sickness, and a small amount of savings.²²

Necker did not clearly identify the necessity-content of the modal or average wage; he merely noted that food, clothing, and shelter were necessary, but not how much of each was required per person. Nor, when he said that wages must supply subsistence, did he indicate whether he meant subsistence for the worker, or for the worker and a family of sufficient size to replace the population, or for the worker and a family of sufficient size to augment the population.²³ Nor did he indicate whether or not the necessity-content of the subsistence wage tended to change through time. Presumably, since the population was then growing, the bulk of the workers were receiving a wage sufficient to replace the population;²⁴ yet, given their proclivity to multiply and their lack of bargaining power, common workers would not long continue to receive a wage high enough to permit population growth.²⁵

Biological, physical, and institutional factors operated in com-

²⁰ *Législation*, pp. 301-02.

²¹ *Ibid.*, p. 118. In 1784 he wrote that "the rewards assigned to all trades which do not require distinguished talent are always proportional to the price of subsistence necessary to each worker" (*L'administration*, III, 90).

²² *Législation*, pp. 68-69 n., 72-73, 116, 137, 139.

²³ *Ibid.*

²⁴ *Ibid.*, pp. 25-28.

²⁵ *Ibid.*, pp. 25-28, 88.

bination to weaken the bargaining power of the propertyless workers. First, population growth increased the number of workers relative to that of proprietors and to the supply of land, thereby intensifying competition among the workers and reducing their real wages to the "most simple necessities." As a consequence, the proprietors, whose number was fixed by inheritance laws and conventions and not by natural growth, were able to hire more workers at reduced wages and to utilize these workers to create not only the products of agriculture and the ordinary handicrafts, but also an increasingly large supply of new types of goods and fantasies.²⁶ Necker thus implicitly postulated a law of diminishing returns and reached the conclusion that population growth increased the rent of proprietors, even though he failed to formulate a rent theory along later English classical lines. Second, the effect of population growth upon the comparative lots of workers and employers was intensified by laws and institutions which fostered concentration of landownership, by the "laws" and "passions" to which Nature "abandons . . . the distribution of wealth," and by "civil institutions," "nearly all [of which] have been made for the Proprietors."²⁷ Whether such institutional factors accounted for the relative scarcity of talented workers he did not specify.

In words anticipatory of Karl Marx, Necker concluded that the "wealthy" are "the great legislators of wages" and the determiners of the occupational composition of a country. The "invincible power that the possessors of subsistence have over men without property" enabled the proprietors to fix the price of provisions and sell them dearly and to pay to workers only the minimum subsistence necessary under given climatic conditions. Therefore money wages were lower in warmer regions where less clothing and shelter were required. So great was the proprietors' power to fix wages, Necker asserted, that were man to discover a new food, less agreeable but no more costly than bread, and capable of sustaining a worker forty-eight in place of twenty-four hours, the money wages paid to supply workers with food would be cut in half and proprietors would be able to employ the money saved to hire additional servitors to minister to their

²⁶ *Ibid.*, pp. 24-26, 137.

²⁷ *Ibid.*, pp. 26, 39-40, 138-39, 329.

(proprietors') desires for comfort, luxuries, and personal service. Inventions that cut the cost of producing subsistence had a similar effect.²⁸ In short, through their control over the disbursement of money income, the owners of property were able both to fix wages at a bare subsistence level and to compel the occupational composition of a country to adapt itself to the satisfaction of their own wants and interests, inasmuch as "necessity" compelled workers to engage in different occupations in such proportions as the money expenditures of proprietors dictated.²⁹

Inequality had become so pronounced, the power of wealth so strong, and the bargaining power of the workers so weak, that the lot of the workers was in some respects more precarious than that of slaves. The obligation of man to be charitable to his less fortunate fellows served to mitigate the lot of the workers, but by no means to redress the balance and restore justice.

The unequal division of property has introduced among men an authority very like that of a master over his slaves. . . . In many respects the empire of the rich is still more independent; for they are not bound constantly to protect those from whom they require services. The taste and caprice of these favorites of fortune fix the terms of their convention with men, whose only patrimony is their time and strength: and as soon as this convention is interrupted, the poor man, absolutely separated from the rich, remains again abandoned to accidents; he is obliged then to offer his labors with precipitation to other dispensers of subsistence; and thus he may experience, several times in the year, all the inquietudes that must necessarily arise from uncertain resources. Undoubtedly, in giving the support of the laws to a familiar constitution, it has been reasonably supposed, that in the midst of the multiplied relations of social life, there would be a kind of balance and equality between the wants, which oblige the poor to solicit wages, and the desires of the rich, which engage them to accept their services. But this equilibrium, so essentially necessary, can never be established in an exact and constant manner; since it is the result of a blind concourse of combinations, and the uncertain effect of an infinite multitude of movements, not one of which is subject to a positive direction. However, since to maintain the distinction of property, they were

²⁸ *Ibid.*, pp. 37-39, 301-02, 308-11; *De l'administration*, III, 90-91. "The rich and powerful made the first laws, or, at least, directed the spirit of them. It was especially to defend their possessions and privileges, that they extolled justice" (*Religious Opinions*, p. 247). Cf. Linguet, below.

²⁹ *Législation*, pp. 39-40, 329.

obliged to leave to chance the fate of the greater number of men, it was indispensably necessary to find some salutary opinion, proper to temper the abuses inseparable from the free exercise of the rights of property: and that happy and restoring idea could only have been discerned in an obligation of benevolence imposed on the will, and a spirit of general charity recommended to all men. These sentiments and duties, the last resource offered to the unfortunate, can alone mitigate a system, in which the fate of the most numerous part of a nation rests on the doubtful agreement of the conveniences of the rich with the wants of the poor.³⁰

With respect to the grain trade as such, Necker reasoned that since France, unlike newly settled regions, produced no more grain than her population could purchase and consume, she could spare grain for export purposes only on condition that she received in exchange agricultural products at least equivalent in amount to the grain exported. Any apparent export surplus of grain was traceable to inequality in landownership, and not to lack of consumptive capacity; for, given a more equal distribution of landownership, there would be no surplus.³¹ Accordingly, were grain exported, the available supply of subsistence would be reduced, and population growth would be checked.³² Moreover, any given amount of labor engaged in the production of grain for export purposes could not produce as much exchange value under the existing circumstances as could the same amount of labor if engaged in producing manufactures for export.³³

Were the restrictions on the grain trade removed, at least three effects would follow, all unfavorable to population growth: (1) in the short run, speculative buying would push the price of grain higher than conditions of supply and demand warranted, depressing real wages, increasing misery, and intensifying the class struggle; (2) these effects would recur whenever a shortage threatened; (3) in the longer run, money wages would rise because of the rise in the price of grain, and French manufacturers would be placed at a competitive disadvantage in relation to

³⁰ *Religious Opinions*, chap. xvii, pp. 242-43. Necker's comments on slavery probably were inspired by Linguet's writings.

³¹ *Législation*, pp. 29-34, 88. Herrenschwand and others shared this opinion in part.

³² *Ibid.*, pp. 28, 50, 88.

³³ *Ibid.*, p. 119.

manufacturers in other lands.³⁴ If, on the contrary, the marketing of grain were made subject to regulation, the wealth and population of France would increase, thus assuring the proprietors of an expanding market. Therefore Necker opposed the removal of restrictions on the exportation of grain.³⁵

Necker concluded, in light of his study of interclass relations, that state intervention was necessary to guarantee the felicity of masses and to conserve the population. The right to property was not a natural but a positive right, an institution established to assure the happiness and the conservation of humanity and therefore completely subordinate to the achievement of this double objective.³⁶ Since the proprietors, whose number was relatively small, were virtually able to fix wage levels and the economic lot of the masses, and often were disposed to pursue aims at variance with the rights of the masses and the objectives of the state, the sovereign was duty-bound to intervene, and, through laws and institutions and administrative measures, to protect the interests of the state, of the several branches of industry and agriculture, and of the population in general.³⁷ Necker did not recommend regulation of numbers, however, even though he attributed the working masses' lack of bargaining power in part to their relative numerousness, and believed the state incapable of completely redressing this lack of balance. In fact, he seems at times to have believed that basic conditions and interclass relationships would always remain unsatisfactory, and that therefore religion would always be necessary to inspire the wealthy to be kind and benevolent and the unfortunate masses to make the best of their lot.³⁸

II

The exploitation or "force" theory of wages was stated with even more vigor by the barrister and critic of the *L'esprit des lois*,

³⁴ *Ibid.*, pp. 42-48, 55-56, 61-65, 71-73, 100-02, 155-57, 161, 165, 171-73, 260-62, 277.

³⁵ *Ibid.*, pp. 34-35, 155-56, 206-07. Some of the above arguments are repeated in *Dernières vues de politique et de finance* (Paris, 1802), pp. 460-75.

³⁶ *Législation*, Part I, chaps. xxvi-xxvii; A. Babel, "Jacques Necker et les origines de l'interventionisme," *Mélanges d'économie politique et sociale offerts à M. Edgard Milhaud* (Paris, 1934), p. 34.

³⁷ *Législation*, pp. 28, 94-97, 274-75, 311-14, 330-31.

³⁸ This is the main thesis of *Religious Opinions*. See also Babel, *op. cit.*, pp. 38-40.

S. N. H. Linguet (1735-1794),³⁹ whose views on population are but corollaries to his theory of the exploitation of the poor by the rich.⁴⁰ In the original state of nature, where *droit naturel* reigned, men were free and equal and independent (though irrational and unforeseeing and much less virtuous than Rousseau and others had supposed), for private property and class relationships founded upon private property did not exist.⁴¹ This state of affairs was brought to an end, however, when some, through violence, seized the land of others, reduced them to slavery, and established societal arrangements intended to perpetuate the new state of affairs. For unless the "original usurpation [were] regarded as a title sacrosanct," the usurpers might be expropriated in turn; whence it was ordained that no individual could seize the property of his neighbor, and man-made laws and government were established to prevent anyone, in especial the masses, from reclaiming or seizing the property of the few.⁴² The propertyless masses thus were reduced to complete and permanent dependence upon the propertied minority, a dependence that was but aggravated when kings, in their struggle with the nobility, nominally emancipated the common man from slavery and servitude.

Society, which had made "of the world a vast dungeon where

³⁹ In the course of the controversy over the probable effects of freedom of external commerce in grain, a number of French writers stated that wages would not rise in proportion to the rise in the price of grain (Weulersse, II, 560-71). Joly de Fleury, procureur-général to the parlement of Paris, said that "the very wealthy always make the law for the very poor," and others said that the worker was absolutely dependent and therefore in a very weak bargaining position (*ibid.*, p. 563).

⁴⁰ Linguet's main ideas appear in his *Théorie des loix civiles ou principes fondamentaux de la société* (London, 1767; rev. ed., London, 1774). These ideas are repeated in *Annales politiques civiles et littéraires du XVIII^e siècle* (London, 1777-92). His criticisms of the physiocrats, all of which are implied in his *Théorie des loix civiles*, appear in *La pierre philosophale* (The Hague, 1768), *Lettres sur la théorie des lois civiles* (Amsterdam, 1770), and *Réponse aux docteurs modernes* (London, 1771). Some of Linguet's views are summarized in Lichtenberger, *Socialisme*, pp. 288-305, and in J. Cruppi, *Linguet* (Paris, 1895). Linguet's thesis that the lot of the slave was preferable to that of the free worker appears already in his *Histoire du siècle d'Alexandre* (Amsterdam, 1762); his view that the wealthy exploited the poor, in *La dixme royale* (London, 1764, 1787). See Lichtenberger, *op. cit.*, p. 290; Cruppi, *op. cit.*, p. 42. Linguet's political ideas are summarized by H. R. G. Greaves, *Economica*, X (1930), 40-55. Some of the citations that follow are from Lichtenberger.

⁴¹ *Théorie* (1767 ed.), pp. 273, 284, 286-87, 310, 350; (1774 ed.), Bk. I, esp. pp. 267-75.

⁴² *Théorie* (1767 ed.), I, 63, 81, 181, 195-96, 298, 352-53; II, 369. Linguet thus did not subscribe to the social compact theory.

there are . . . only warders and prisoners," was composed of two parts, the propertyless and poor laboring class, and their exploiters, the rich. The latter, in consequence of their ownership "of money . . . of commodities . . . claim for themselves the exclusive right to tax the reward of the industry by which commodities are produced." The propertyless poor from whose labor flowed the wealth and income of the rich, had no guardians to protect their interests; therefore they were helpless and at the mercy of the rich and the avaricious, who were saved even the pain of hearing the cries of the worker as he "suffered and died silently in his hut. . . . Workers are born, increase, and rear themselves for the service of the opulent, without causing him the least expense, like the game that he massacres on his domains."⁴³ The rich, in order to remain rich, were compelled to exploit the poor, since what the former got in excess of their normal share of commodities they could get only by taking part of the normal share of the exploited.⁴⁴ The sole purpose of the laws and customs consecrating property rights was to protect the rich against the poor and thereby conserve the capacity of the few to exploit the many (i.e., the 75-95 per cent who were poor).⁴⁵

The "insolent" and "barbarous" wealthy employers of the poor, in consequence of their freedom from immediate economic need, not only sought to hire the worker for as low a wage as possible, but were able both to engage him for a "mere trifle," for a sum sufficient only to provide a miserable subsistence, and to squeeze out of him the maximum possible amount of effort per day. For the laborer was always so pressed by need and poverty that "he bewailingly implores [employers] to accept his services"; he dared not bargain. "If he does not work today at any price, in two days he will be dead of inanition." And being unable to bargain, and therefore unable to obtain more than "the price of his subsistence for the day [of work] that he furnishes," the worker's bargaining position always remained weak and he was always compelled to work for the barest subsistence.⁴⁶ The

⁴³ *Théorie* (1767 ed.), II, 517; *Annales*, I, 94; XIII, 495-503.

⁴⁴ *Réponse*, II, 223-24.

⁴⁵ *Théorie* (1767 ed.), I, 192, 196, 228; (1774 ed.), I, Bk. I; *Annales*, I, 250.

⁴⁶ *Théorie* (1767 ed.), I, 274, 462-63; II, 274, 472, 482, 510; *Annales*, I, 98-99; VII, 216.

lot of the French workers, especially that of the artisans, was made even worse by the fact that they were less free and independent than the English workers, and were denied, under penalty of imprisonment, the right to agitate against the corporate regulations which fixed wages at a bare subsistence level.⁴⁷

The lot of the "free" worker was far more miserable than that of the slave or the horse. The master of the slave, having an investment in him, fed and sheltered him whether he worked or not (as on feast days and in bad weather), just as the owner of a horse fed and sheltered it even when idle. The employer of the free laborer, on the contrary, having no pecuniary investment in him, cared not how unhealthful the task to which the free laborer was assigned, nor whether he died of starvation after the task in question was completed. There would always be other "free" laborers available.

The lot of a horse well nourished, well groomed, and well treated in illness, is better than that of the wretched workman, free but universally despised, everywhere restricted; condemned to the hardest labor in summer, to the most rigorous privation in winter; always uncertain if the scanty food he has earned today by the sacrifice of a part of his existence will be procurable tomorrow at the same price.

The so-called liberty of the free worker therefore was one of the most "melancholy evils" visited upon men. "The most favorable thing that can happen to every being bearing the form of man, but condemned to earn his living by the employment of his hands, is to be elevated nearly to the rank of a nag [or slave]."⁴⁸

For the "economic follies" that filled the "pestilential books"

⁴⁷ *Lettres*, pp. 178-80.

⁴⁸ *Théorie* (1767 ed.), I, 462-64; II, 482; *Annales*, I, 98-102, 109, 250; XIII, 501-04; Lichtenberger, *op. cit.*, p. 296. Linguet comments on the beneficial effects of slavery in *Théorie* (1774 ed.), I, 14; III, Bks. IV-V. Linguet was annoyed by the dreams of the comfortable French theorists who sought liberty for the slaves in America, but neglected the wretched workers in France (*Théorie*, 1767, II, 280-84). As has been noted (Chapter II), Melon drew a comparison between the lot of the slave and that of the French domestic. Linguet's argument concerning the superiority of the lot of the slave to that of the free laborer was similar to that developed by the defenders of slavery in the ante-bellum South in the United States. The latter apparently developed the thesis independently of Melon, Necker, and Linguet. See the writer's articles on population theory and the proslavery argument in America in *The South Atlantic Quarterly*, XXXIV (1935), 170-89, and *Journal of Southern History*, II (1936), 360-89.

of the physiocrats,⁴⁹ Linguet had no more use than for the "screaming of the philosophic aviaries."⁵⁰ For he believed, much more than any of his contemporaries, that there could be no real political liberty and no real economic and contractual freedom so long as society rested upon marked economic inequality.⁵¹ To the physiocratic argument that a rise in grain prices would benefit the cultivator and the landed proprietor and thus augment agricultural production, Linguet replied that in the longer run the prices of all commodities would rise in the same proportion as grain, thus canceling any temporary gain on the part of agriculturalists. Temporary gains by the agriculturalists would be at the expense of the consumers of grain and the wage earners, and not the result of the improvement and augmentation of production.⁵² To increase the price of grain before augmenting wages was "horrible," for the workers already were receiving starvation wages.⁵³ The workers would "suffer horribly until the just equilibrium between wages and the price of grain had been established"; but establishment of such an equilibrium, if attainable at all, would take time, for in consequence of the rise in the price of grain and the fall in the real wage level, the bargaining power of the worker would become weaker than ever.⁵⁴

Believing, as did Rousseau, that the size and rate of population growth constituted an index of the health of a society and its institutions, Linguet found in the innumerable society-created checks to population growth in France evidence of the rottenness

⁴⁹ Linguet wrote in the most abusive terms of the physiocrats. E.g., see Weulersse, I, 204-05, 232; II, 439, 607, 683, 706. In his early works Linguet acknowledged himself a disciple of Quesnay.

⁵⁰ Linguet here refers to advocates of egalitarianism such as Rousseau (Cruppi, *op. cit.*, pp. 163-64; Lichtenberger, *op. cit.*, p. 296).

⁵¹ Greaves, *op. cit.*, pp. 47-50. "For the good of whom, these sentimental parades, these projects of reform in finance and taxation . . . [English] parliamentarism, . . . [Montesquieu's] judiciary companies which, under the pretext of restraining the royal power, serve only their own privileges, and but multiply the instruments of tyranny. For the good of whom all this, since the poor must always be oppressed by the rich, since he who works must always serve him who possesses." Cited in Cruppi, *op. cit.*, pp. 168-69; see also *Lettres* (pp. 107-08), where he says that civil liberty consists in the free enjoyment of property.

⁵² *Lettres*, pp. 172-74; Lichtenberger, *op. cit.*, pp. 298-300. Freedom of commerce in grain had not benefited England (*Lettres*, pp. 174-78).

⁵³ *Réponse*, II, 83-84, 186-87; *Lettres*, pp. 174, 176, 178-80.

⁵⁴ *Lettres*, pp. 174 ff. In support he pointed to the alleged failure of money wages to rise (*ibid.*, pp. 170, 181; *Réponse*, II, 140-41).

of her institutions. The object of nature was "principally the conservation of the species," and the organs of men and women were suited to this end.⁵⁵ The pleasures associated with a large family more than counterbalanced the pains and burdens suffered by the parents.⁵⁶ In the past, when the state of society had been simple, women had fulfilled their duly appointed task of bearing children.⁵⁷ But with the concentration of property and power in the hands of the few, and the consequent growth of luxurious consumption, the checks to population growth had multiplied.⁵⁸ Luxury sometimes produced debauchery which in turn caused sterility.⁵⁹ Luxury caused the married to be interested in sterile pleasures and to look upon unfruitfulness as no inconvenience;⁶⁰ it "makes a game of seduction and a crime of motherhood," occasioning recourse to "criminal precautions for preventing motherhood."⁶¹ Luxury caused the poor to engage in unhealthy and less productive pursuits.⁶² Among the other checks listed are war, pestilence (which is largely traceable to urban overcrowding and bad sanitation), the substitution of grain culture for root culture,⁶³ the interdiction of divorce, ecclesiastical celibacy,⁶⁴ and the great mortality traceable to the indigence of the masses.

Unlike many of his contemporaries, Linguet advocated no social reforms, for he supposed that so long as income and wealth were distributed very unequally, none of the currently proposed political reforms would accomplish anything.⁶⁵ He remained virtually content to say that since the first right and duty of

⁵⁵ *Théorie*, II (1774 ed.), 222-23, also 20.

⁵⁶ *Ibid.*, II, 7.

⁵⁷ *Ibid.*, II, 14, 18, 20, 101. Even when men had several wives, the reproductive function was fulfilled when customs were simple (*ibid.*, II, 20). Polygamy, Linguet said in reply to Montesquieu, was not per se a check to population growth, but only when accompanied by certain abuses such as voluptuousness, luxury, and the sterilizing of eunuchs and slaves (*ibid.*, II, 36-39). ⁵⁸ *Ibid.*, II, 14-18.

⁵⁹ *Ibid.*, II, 153-55. Sexual excess caused infertility (*ibid.*)

⁶⁰ *Ibid.*, II, 18. Virtue flourished when women were held in restraint (Cruppi, *op. cit.*, p. 171).

⁶¹ *Théorie* (1767 ed.), I, 223.

⁶² *Ibid.*, I, 216, 221.

⁶³ Greaves, *op. cit.*, p. 47; Lichtenberger, *op. cit.*, p. 298.

⁶⁴ Were divorce permitted, the fecund partner to a sterile union might enter a new marriage with a fertile party (*Théorie*, 1774 ed., II, 80-84). For Linguet's views on religious celibacy see *L'essai philosophique sur le monachisme* (Paris, 1775).

⁶⁵ *Lettres*, p. 191; *Théorie* (1767 ed.), I, 274; Cruppi, *op. cit.*, pp. 163-64, 168-69.

everyone is the conservation of his life, the right of property, at least with respect to the necessities of life, is limited and subordinate to the "right" of each "to demand aliments," and to the obligation of the owners of wealth to succor the needy.⁶⁶ He regarded the prevailing misery as unnatural, but did not preach the revolution he anticipated.⁶⁷ Although he said that the government should protect the needy against the "avarice" of proprietors, rather than augment the price of grain,⁶⁸ he virtually preached passive acceptance of a miserable lot which, while unnatural, was not very susceptible of improvement.⁶⁹ Whereas Necker recommended religion as an anaesthetic, Linguet implied that the masses would suffer less if they remained ignorant and brutalized.⁷⁰

Several social critics, less important than Necker and Linguet, shared their opinion that under existing circumstances the masses were bound to be exploited by the employers and could hope for no more than a bare subsistence wage. J. de Pechméja defended Colbert's efforts to control the grain trade, saying that such action was necessary to assure subsistence to the poor,⁷¹ and that in the absence of protective action by the state, all who were propertyless and dependent upon the rich and the propertied for employment would be exploited and would be able to obtain only bare subsistence.⁷² De Lanjuinais was content to repeat Linguet's argument that the worker was a chained slave, and that the proprietors, who made the law under which workers lived, provided the latter with only bare subsistence.⁷³ Carra, Feroux, and André Brun reasoned in a somewhat similar fashion that when the vast

⁶⁶ *Annales*, VI, 232; VII, 203-04, 223, 229; XIII, 218.

⁶⁷ *Ibid.*, I, 102, 345; *Réponse*, I, 116.

⁶⁸ *Lettres*, pp. 176-77; *Annales*, pp. 203-04.

⁶⁹ *Réponse*, I, 116; *Théorie* (1767 ed.), I, 182; II, 519.

⁷⁰ Lichtenberger, *op. cit.*, p. 305. In *Fanatisme des philosophes* (Paris, 1764), Linguet condemned luxury and described the lot of the savage as preferable to that of some civilized peoples (Lichtenberger, *op. cit.*, p. 290). He commented favorably on the social experiment of the Jesuits in Paraguay (*ibid.*, p. 290).

⁷¹ *Éloge de Colbert* (Paris, 1773), pp. 20 ff. This *éloge* was awarded second prize, the first going to Necker. Pechméja, a friend of Raynal, inspired the latter's attack upon Negro slavery (A. Feugère, *L'abbé Raynal*, pp. 181-84. On Pechméja's works see Lichtenberger, *op. cit.*, pp. 367-69, and *Revue internationale de sociologie*, I (1893), 355-58.

⁷² *Éloge*, pp. 7, 20 ff.

⁷³ *Le monarque accompli* (Lausanne, 1773), I, 100, 137, 147; Lichtenberger, *op. cit.*, pp. 393-94.

majority were propertyless, the owners of property would be able to exploit the common man and pay him only a scant subsistence at the best.⁷⁴ In the *Encyclopédie méthodique* the Marxian subsistence theory of wages developed by Necker and Linguet appears several times.⁷⁵ A similar view appeared in an anonymous brochure whose author believed each man entitled to enough income to marry and rear a family. Wages could and did fall much below this level because laborers were under much greater pressure to hire themselves out for whatever they could get than the rich were under pressure to purchase the services of labor. Therefore, this author proposed, *inter alia*, that the state create public workshops in which a satisfactory wage would be paid, saying that the resulting competition of the government for labor would elevate wages to the proper level.⁷⁶ F. N. Babeuf, who had been inspired by Mably, Morelly, and Rousseau, and who proved one of the most revolutionary of the anticipators of communism during the period of the French Revolution, took it for granted that where a few wealthy persons controlled the employment open to the vast propertyless multitude, the members of the latter class would not be able to obtain more than subsistence from their employers.⁷⁷

III

Many French writers, who agreed in substance with the view that the existing set of social arrangements was not conducive to the happiness of the common man, assented neither to Linguet's pessimism nor to the physiocratic scheme of reform.⁷⁸ Some,

⁷⁴ J. L. Carra, *Système de la raison ou le prophète philosophe* (London, 1782), pp. 68-69, 76; C. L. Feroux, *Vues d'un solitaire patriote* (Paris and The Hague, 1784), I, 31, 216 ff.; A. Brun, *Le triomphe du Nouveau Monde* (Paris, 1785), I, 51; II, 219, 251, 259. See also Lichtenberger, *op. cit.*, pp. 393-400.

⁷⁵ In "Luxe" (*Finance*, II), LXXVIII (1785), 775-76, 778, the anonymous author speaks of the "law of the proprietors" which forces the propertyless to work for the barest subsistence (p. 775). He reasoned, too, as had Cantillon, that the proprietors diminish the population by diverting the land from the subsistence of men to the subsistence of horses and to the creation of parks and gardens (p. 777). In "Grain" (*ibid.*, pp. 395-97), the free exportation of grain was described as inimical to population growth and to the economic interests of the working class; and the landed proprietors were described as able to fix the wages of the workers at the bare subsistence level.

⁷⁶ *Vœu de la dernière classe du peuple* (Paris, 1783).

⁷⁷ *La cadastre perpétuel* (Paris, 1789), *Discours préliminaire*, pp. xxvii-xxxv.

⁷⁸ In the closing third of the eighteenth century there appeared a great number of

like Morelly and Mably, neither of whom devoted much attention to wages and population problems as such, believed that appropriate reforms, more or less collectivistic in character, would bring into being a world in which all men could find happiness.

Believing nature to be beneficent, Morelly sought to prescribe an organization of society which, being consonant with the spirit of the laws of nature, would assure to each member of society as great an amount of happiness as was attainable.⁷⁹ Man's present unhappiness was not inherent in the nature of things; it was not attributable to the viciousness of his nature. Man is social and virtuous by nature; he had been so even in the primitive state when he had acted through instinct rather than through reason, and he had remained so until his socioeconomic environment had ceased to correspond with the natural order.⁸⁰ Man's physical environment was not naturally unfriendly; there was enough sustenance for all, provided that men worked and that some did not appropriate a disproportionately large share. "The world is a table sufficiently supplied for all the guests." No one is master of the table; its contents belong always to those who are hungry, and not to those who are satiated.⁸¹ With the establishment of private property and economic inequality, and the consequent birth of avarice (the root of all vice), man's social environment no longer corresponded to the requirements of the natural order;

works condemning the prevailing organization of society on the ground that it permitted so much poverty. The authors of these works did not treat of wage or population theory as such, however; in general, they associated the evils they condemned with defective political and socioeconomic organization and not with the shortcomings of the natural laws that governed human behavior. These writers condemned concentration of wealth and inequality and the resulting luxury of the few; protested against the exemption of the clergy and nobility from their proper tax burden; and advocated more or less restriction of property rights (Lichtenberger, *op. cit.*, chaps. xiii-xv, esp. pp. 383-90, 396-406, 412-30, 440, 452-55). Through laws designed to redistribute wealth and prevent its concentration in the hands of the few, various eighteenth-century writers hoped to abolish need and the capacity of the few to exploit the working masses (*ibid.*, pp. 455-56).

⁷⁹ *Code de la Nature, ou le véritable esprit de ses lois de tout temps négligé ou méconnu*, p. 174. The *Code* was first published in 1755. Page references here are to the 1757 printing. The *Code* was written in part to reply to criticisms of Morelly's philosophy as enunciated in an earlier work, the *Basiliade*, a poetical satire on contemporary society, which already embodied many of his views. On Morelly see Lichtenberger, *op. cit.*, pp. 104-27; C. H. Driver, in Hearnshaw, *op. cit.*, pp. 217-28; E. Dolléans' introduction to 1910 (Paris) edition of the *Code de la nature*.

⁸⁰ *Code*, pp. 13-22, 25, 63, 116-19, 151.

⁸¹ *Ibid.*, p. 22.

thereafter this unsatisfactory social environment tended to make man evil and to perpetuate the inequality and suffering that had come into existence with private property.^{81a} The solution for human ills, therefore, consisted in the removal of the institution of private property and the evils clustered about it.⁸²

Part IV of the *Code* is devoted to a description of "legislation conformable to the intentions of Nature" and suited to establish a "situation in which man might be as happy and as beneficent as it is possible for him to be in this life."⁸³ This legislation provides for the collective ownership of all but personal goods, the obligation on part of each to serve the community to the best of his ability, and the right of each to maintenance.⁸⁴ Luxurious consumption is prohibited to all.⁸⁵ Celibacy is permitted only to those over forty years of age. Healthy young men are required, upon reaching the age of fifteen to sixteen years, to choose wives pleasing to themselves, at an annual festival held for this purpose. Divorce, with the consent of one or both parties, may be obtained ten years after marriage. Divorced persons may marry one year after having obtained a divorce, but only to persons of the same age or older.⁸⁶

That, under the ideal conditions established, population pressure might develop and even destroy the beneficent institutions created, was not clearly anticipated by Morelly. While he admitted that population growth might make necessary the establishment of new colonies and cities, he did not explicitly anticipate a deficit of land for the support of population. He merely suggested that when deaths had come to balance births in the various subdivisions of the ideal society, this condition of balance could and would be preserved.⁸⁷

Several subsequent writers favored the establishment of a more or less collectivistic set of social arrangements as the best

^{81a} *Ibid.*, pp. 28-34, 104-19.

⁸² Proper education and the destruction of superstition would eliminate evil and prejudice, since man is plastic (*ibid.*, pp. 31-34, 163-69).

⁸³ *Ibid.*, p. 174. The whole universe is perfecting itself, he said in one place (*ibid.*, pp. 130-32).

⁸⁴ *Ibid.*, Part IV, "fundamental," "economic," and "agrarian" laws.

⁸⁵ *Ibid.*, pp. 153-94, 208-13, law group (vi).

⁸⁶ *Ibid.*, pp. 204-07, 213, law group (ix). Adultery is subject to severe punishment (*ibid.*, p. 320).

⁸⁷ *Ibid.*, pp. 178, 207-08; recourse to emigration is also implied.

means of improving the lot of the masses.⁸⁸ They rejected the doctrine that the property right is a natural right, saying instead that the rights of each were subordinate to the general good and to the right of everyone to subsistence and comfort. Of these collectivists, only C. R. Gosselin seems to have recognized in any way the relationship of population pressure to poverty; he noted that population would grow in consequence of a gradual equalization of landownership and added that "if a nation came to have a population superabundant relative to its possessions," it could exercise its right to migrate to and take over land of nations with a superabundance of land.⁸⁹ In general, neither Gosselin nor the other collectivists conceived of an attack upon collectivism such as Wallace had already made and Malthus would soon make in England.⁹⁰

IV

G. B. de Mably (1709-1785), brother of Condillac and an influential political theorist, developed views somewhat similar to, but less optimistic than, those of Morelly.⁹¹ Subscribing to the sensationalistic psychology of Condillac and to the belief that men would be happy in a simple society wherein civil law approximated the law of nature, Mably attributed the misery of

⁸⁸ In a work (*Le testament de Jean Meslier*), written before 1729, but not published in full until 1864, Meslier advocated the collective ownership of property. "The land produces almost always enough for all to live in comfort" when the produce is divided equitably. He said that the poor were in such "complete dependence upon the nobles and the wealthy" as to be "their slaves, so to speak." This dependence was a consequence of the establishment of private property (*Testament*, II, 178-80, 203, 208-10, 222; cited in Lichtenberger, *op. cit.*, pp. 75-83). See also C. Grueneberg's article on Meslier, *R. d. e. p.*, II (1888), 277-98. Malthus' theory that population pressure produces misery "never entered the head" of Meslier, says Grueneberg (*ibid.*, p. 293).

⁸⁹ *Réflexions d'un citoyen adressées aux notables sur la question proposée par un grand roi: "En quoi consiste le bonheur des peuples et quels sont les moyens de le procurer?" ou sur cette autre: "D'où vient la misère et quels sont les moyens d'y remédier?"* (Paris, 1787), pp. 23-24, 49-53. In Part III of this work Gosselin repeated Necker's arguments against freedom of trade in grain and in support of the thesis that under the existing system the common man could and would be exploited and receive only a bare subsistence wage.

⁹⁰ However, see n. 116, below. For a discussion of the late eighteenth-century French collectivists see Lichtenberger, *op. cit.*, pp. 433-50; also H. J. Laski, *The Socialist Tradition of the French Revolution* (London, 1930).

⁹¹ *Œuvres de Mably* (Paris, 1794-95). For a complete account of Mably's main views see C. A. Whitfield, *Gabriel Bonnot de Mably* (London, 1930); for short accounts, see C. H. Driver, in Hearnshaw, *op. cit.*, pp. 228-51, and Lichtenberger, *op. cit.*, pp. 221-46.

the masses, not to their inherent depravity, but to the evil social environment which had come into being with the establishment of private property, economic inequality, luxury, and the vices therewith associated. Man would be good, virtuous, sociable, and happy, Mably believed, in a society organized on communistic lines and free of private property and economic inequality—preferably, under agrarian communism. He did not believe such a form of society to be easily and immediately attainable, however; man had first to be completely re-educated and permeated with a new set of values.⁹²

Concerning wage and population theory in general, Mably was silent, presumably because he believed that in an ideal society, founded upon economic equality and virtue, there would be no population and distributive problems. In reply to the physiocrats,⁹³ he said, among other things, that a social system founded upon private property and laissez faire would not assure justice to all; that private property was not the natural consequence of population growth and pressure;⁹⁴ and that economic inequality was not in accord with the prescripts of the natural order.⁹⁵

Mably indicated that a population might be too large and implied that it might be too small, but he did not conceive of anything like an economic optimum population. A people's domain must suffice to assure subsistence to all.⁹⁶ To the contention that under communism there would be less subsistence and fewer people, he replied that a community of fewer but happier citizens was to be preferred to one containing many, but unhappy, members. "It were better there were only a million happy men on the entire earth than to see there this numberless multitude of paupers and slaves who only half exist in degradation and want. [Had] property . . . never been established the earth would be as fully cultivated and populated as it is possible for

⁹² This type of argument permeates Vols. IX-XI of *Œuvres*.

⁹³ See his reply to Mercier's exposition of physiocracy, *Doutes proposés aux philosophes économistes, sur l'ordre naturel et essentiel des sociétés politiques* (1768), in *Œuvres*, XI.

⁹⁴ *Ibid.*, p. 506; *Œuvres*, XIII, 290-97; Whitfield, *op. cit.*, pp. 260-61.

⁹⁵ Lichtenberger, *op. cit.*, p. 227. In his *Du commerce des grains* Mably advocated governmental regulation of the grain trade (*Œuvres*, XIII, 263, 290).

⁹⁶ *Œuvres*, XI, 6.

it to be. Does not happiness multiply men?"⁹⁷ Inasmuch as he condemned luxury and favored a simple life, it is inferable that Mably did not prefer a population no larger than consistent with maximization of per capita income. Happiness depended not upon wealth alone, but upon the observation and preservation of the necessary virtues.⁹⁸ And such virtues could not persist in the face of growing opulence and luxurious consumption; wherefore the restriction of luxurious consumption by means of sumptuary regulations was necessary.⁹⁹

In consistence with his views already summarized, Mably did not attribute widespread misery to population pressure, nor did he anticipate misery from this source in his ideal society. Nature had provided enough for all, given equality and fairness in the distribution of her bounty.¹⁰⁰ Evils of all sorts, when they arose, were traceable to economic inequality and institutions not in accord with reason and nature; therefore, evils were susceptible of removal and were not necessarily inherent in all societies.¹⁰¹

v

Rousseau shared the belief of Mably and Morelly in the virtues of a simple culture, their dislike of prevailing social conditions, and their opposition to the physiocratic panacea; but he was far more pessimistic than they that a satisfactory situation could be established, at times preaching, as did Pope, that man should accept his place in society, and not seek to transcend it. Nonetheless, through his works ran a broad theory with respect

⁹⁷ *De la législation ou principes des lois*, in *Œuvres*, IX, 82-83.

⁹⁸ *Œuvres*, XI, 25, 27-29.

⁹⁹ *Observations sur le gouvernement et les lois des États-Unis d'Amérique* [1784], *Œuvres*, VIII. Mably said that at first commerce causes both the wealth and the population of a country to grow; then it stimulates agriculture and the clearing of land, and enables men to multiply, since children no longer are a burden to parents. In the end, however, commerce introduces superfluities, luxury, and avarice, and thus brings about the enfeeblement and corruption of the people (*ibid.*, esp. pp. 441-44, 448, 456; also Whitfield, *op. cit.*, pp. 71-85). Colonies did not benefit the mother country, even under the best of circumstances, Mably held (Whitfield, *op. cit.*, p. 118). When tracing out the effects of commerce, Mably cites Cantillon and J. Brown's *An Estimate of the Manners and Principles of the Times* (London, 1759). De Serionne criticized Brown (see Chapter VII), who held that commerce in its final stages is fatal to a country and that, by causing invention, it diminishes population.

¹⁰⁰ *Œuvres*, X, 306.

¹⁰¹ For types of this argument see *Œuvres*, III, 300-20; IX, 43-157; X, 25-196; XI, 25, 30-45.

to the way out, a theory that underwent evolution until its comparatively final formulation in the *Social Contract* (1762). So long as man had lived the life of the noble savage,¹⁰² without family or property, the sexes uniting when "accident, opportunity, or inclination brought them together," men had been happy; for they had remained free of most diseases, of knowledge of good and evil, of fear of death, of inequality, and of restrictions upon liberty. With the development of unrestricted private property and its concomitants, inequality and society, this happy pristine state of the noble savage had come to an end. No longer was man free and content. Now a rich minority exploited the poverty-ridden majority, and the lot of the masses was hard and miserable. From the present evil state of affairs there was but one path of escape. It did not consist in a return to primitive simplicity, inasmuch as science and society could not be destroyed; it was not to be found in a society founded upon individualism, rational and enlightened self-interest, and a body of natural rights inherent in men as individuals, for individuals were the product of society, rather than society the product of individuals; it lay, rather, in the establishment of the form of community or association described in his *Contrat social*—an organic, moral, totalitarian community or association, the members of which enjoyed liberty, equality, popular sovereignty, and rights, such as property, in the form and manner sanctioned by the collective will of the community: rights were held within, and not against, the community.¹⁰³

Rousseau did not integrate his demographic doctrines with his social theory, nor specifically indicate that there would be no

¹⁰² Concerning the role of the "good savage" and similar sentimental concepts in French works critical of prevailing social arrangements see Lichtenberger, *op. cit.*, chap. xii. When Rousseau extolled the lot of the savage, he was not really extolling savage life and culture; he was merely emphasizing the importance of simple, common feelings and satisfactions, of the so-called "realities" of life, and using the savage as an archetype.

¹⁰³ Rousseau was influenced by Plato, by Locke, and by Hobbes, of whom he was also a critic; he gives the impression of being inconsistent (e.g., in some places he condemns property rights, and in others approves them conditionally) even though much of what he said he believed to cohere. Interpretations of Rousseau's social theory differ. On this score see Hearnshaw, *op. cit.*, pp. 187-93; C. A. Vaughan (ed.), *The Political Writings of Jean Jacques Rousseau* (Cambridge, 1915), I, 102-10; G. H. Sabine, *A History of Political Theory* (New York, 1937), chap. xxviii; R. Hubert, *Rousseau et l'encyclopédie* (Paris, 1928); also Lovejoy, *op. cit.*, pp. 200-07.

population problems in his organic community. He confined himself to supporting certain of his opinions with demographic arguments. In general, he looked upon the rate of population growth as the best index of the health of the government of countries, and as the best means of comparing the soundness of different governments at any particular time and of given governments at different times. Depopulation constituted sure proof of the badness of government, for given good government and liberty, men multiplied even in the face of war.

What is the end of political association? The preservation and prosperity of its members. And what is the surest mark of their preservation and prosperity? Their numbers and population. Seek then nowhere else this mark that is in dispute. The rest being equal, the government under which, without external aids, without naturalisation or colonies, the citizens increase and multiply most, is beyond question the best. The government under which a people wanes and diminishes is the worst. Calculators, it is left for you to count, to measure, to compare.¹⁰⁴

In support of his view that man had been harmed by the development of civilization and its concomitants, Rousseau pointed to the fact that numbers had grown when man's life had been simple, only to decrease in consequence of the growth of civilization. In the simple state of nature man sought only "food, a female, and sleep" and feared only "pain and hunger"; he did not even struggle with his fellows over women, for to him "one woman is as good as another." So propitious had been the state of nature with respect to multiplication that man's population, Rousseau implied, had grown beyond the number that could be supported by the "natural produce of the earth."¹⁰⁵ Moreover, the children born in the state of nature usually had been robust, only the robust had tended to survive, and the race had become strong.¹⁰⁶

¹⁰⁴ *Contrat social* (1762). See Vaughan, *op. cit.*, II, 87, also pp. 87-88 n. The translation follows the Everyman edition of the *Contrat*.

¹⁰⁵ *Discours sur l'inégalité* (1755), Vaughan, *op. cit.*, I, 151-52, 163-65.

¹⁰⁶ *Ibid.*, pp. 143, 215 n. Rousseau merely implied that the race became stronger. Rousseau admitted that the pregnancy rate would be higher under the continuous cohabitation associated with the civilized family system than under the system of fortuitous encounters between male and female in the state of nature where man's passions were less strong. Nevertheless, children born in the state of nature were more

Civilization had unleashed a multitude of checks to population growth: war and conquest;¹⁰⁷ epidemics, traceable to the foul air associated with urban crowding;¹⁰⁸ unhealthy trades, which shortened men's lives;¹⁰⁹ the diseases and illnesses caused by the overconsumption of some, by the overwork of others, and by the generally unnatural modes of life of those living in civilized communities;¹¹⁰ the control exercised by the Church over matrimony;¹¹¹ and the imposition of population-checking taxes.¹¹² More important still were the modern fashions and practices that were causing mothers to give up suckling their children, and women to fear and avert childbirth.

Not content with having ceased to suckle their children, women no longer wish to do it; with the natural result—motherhood becomes a burden; means are found to avoid it. They will destroy their work to begin it over again, and they thus turn to the injury of the race the charm which was given them for its increase. This practice, with other causes of depopulation, forbodes the coming fate of Europe. Her arts and sciences, her philosophy and morals, will shortly reduce her to a desert. She will be the home of wild beasts, and her inhabitants will hardly have changed for the worse.¹¹³

Were mothers to resume the maternal duty of nursing, Rousseau said, the threat of depopulation would disappear.

robust and prone to live, and the women, being less abused in their youth, remained fecundable longer (*ibid.*, pp. 143, 164-65, 215 n.).

¹⁰⁷ See his treatment (written in 1756) of the Abbé de Saint-Pierre's *Jugement sur la paix perpetuelle* (Vaughan, *op. cit.*, I, 387, 391). In *Contrat social*, however, Rousseau says that "that which truly makes the species prosper is less peace than liberty" (Vaughan, II, 88 n.).

¹⁰⁸ *Discours*, Vaughan, *op. cit.*, I, 204.

¹⁰⁹ *Ibid.*, I, 205.

¹¹⁰ *Ibid.*, I, 146.

¹¹¹ It was to the interest of the clergy, he said, to prevent marriage, for in the absence of marriage and heirs, the property of heirless owners tended to go to the Church (*Contrat*, Vaughan, II, 133 n.).

¹¹² The worst tax is one which falls on the cultivator, on land, for it depopulates both countryside and state (*Économie politique*, Vaughan, *op. cit.*, I, 271). Taxes on luxuries are defended, as are taxes designed to prevent extreme inequality (*ibid.*, pp. 271-72). While he considered the government obligated to succor the poor, he believed that this succor should be made possible through the creation of conditions conducive to productive employment (*ibid.*, pp. 254-55, 258). In *Le gouvernement de Pologne* (1772) Rousseau advocates as the best tax (and cites in support Vauban and the Abbé de Saint-Pierre) a tax on all land in proportion to its yield and payable in kind (Vaughan, *op. cit.*, II, 484-85).

¹¹³ *Émile* (1762), Everyman ed., p. 12; also pp. 11-13.

But when mothers deign to nurse their own children, then will be a reform in morals; natural feeling will revive in every heart; there will be no lack of citizens for the state; this first step by itself will restore mutual affection. . . . When women become good mothers, men will be good husbands and fathers.¹¹⁴

Most important of all the more immediate checks was luxury, which "sooner or later depopulates the state." Where luxury prevailed, men lost the desire for children, who, being a "burden to their parents," were killed "indiscriminately before they are born";¹¹⁵ there vice reigned, unhealthful trades were pursued, and the many were oppressed in order that the few might live luxuriously. There the arts tended to flourish and to augment the national wealth, only later to undermine and depeople the state, or to expose it to attack by poor nations not yet victims of luxury and its enervating effects.¹¹⁶

Rousseau therefore rejected the "principle of population," as enunciated by Mirabeau, saying that it was "inexplicable in itself,

¹¹⁴ *Ibid.*, pp. 13-14. Rousseau condemned (*ibid.*, pp. 11-12) practices and fashions that were unfavorable to nursing, and mothers who, in order to disport themselves in the cities, turned their infants over to mercenary wet nurses. For an account of the long-continued attack upon mercenary wet nursing, which Rousseau did much to discredit temporarily, see my *France Faces Depopulation*. For an account of child care in eighteenth-century France see A. Franklin, *La vie privée d'autrefois*, Vols. XIX-XX, on *L'Enfant* (Paris, 1895-96). Breast nursing was ridiculed in song as early as 1500 (Lacroix, *op. cit.*, II, 982-83).

¹¹⁵ *Discours*, in Vaughan, *op. cit.*, I, 143. Here Rousseau is speaking in somewhat figurative terms. Elsewhere (*ibid.*, pp. 204-05) he says: "What shameful methods are practiced to prevent the birth of men, and cheat nature; either by brutal and depraved appetites which insult her most beautiful work—appetites unknown to savages or mere animals, which can spring only from the corrupt imagination of mankind in civilised countries; or by secret abortions, the fitting effects of debauchery and vitiated notions of honor; or by the exposure or murder of multitudes of infants, who fall victims to the poverty of their parents, or the cruel shame of their mothers; or, finally, by the mutilation of unhappy wretches, part of whose life, with their hope of posterity, is given up to vain singing, or still worse, the brutal jealousy of other men. . . . What if I should undertake to show humanity attacked in its very source, and even in the most sacred of all ties, in which fortune is consulted before nature, and, the disorders of society confounding all virtue and vice, continence becomes a criminal precaution, and a refusal to give life to a fellow-creature, an act of humanity."

¹¹⁶ *Ibid.*, pp. 204-06. The barbarian invaders of Europe began to decline in number after they succumbed to the industry and arts of civilization. "I fear someone may at last answer me by saying that all these fine things, arts, sciences and laws, were wisely invented by men, as a salutary plague, to prevent the too great multiplication of mankind, lest the world, which was given us for a habitation, should in time become too small for its inhabitants" (*ibid.*, p. 206).

contradictory with the facts, impossible to conciliate with the origin of nations." Rousseau's main criticism seems to have been that wealth, particularly when "disposable" or mobile in form, was not favorable, but unfavorable to population growth.¹¹⁷ He was not antipopulationist in the physiocratic sense, stipulating that the state support as large a population as its territory would support at a simple level of existence.

There is . . . a relation proper to give a State its true grandeur. It is men who make the State, and it is terrain which nourishes the men. This relation is therefore that the land suffice for the support of the inhabitants, and that there be as many inhabitants as the soil is able to nourish. It is in this proportion that one finds the *maximum* of power in a given number of people. For if there is too much terrain, the defense of it is onerous, the cultivation insufficient, the product superfluous; it is the proximate cause of defensive wars. If there is not enough of it, the State, in order to supplement it, finds itself at the discretion of its neighbors; it is the proximate cause of offensive wars.¹¹⁸

Rousseau's disciples did not fear population pressure. Mercier and Rétif de la Bretonne attributed poverty to the exploitation under the existing social system, and not to population pressure.¹¹⁹ The revolutionist, Saint-Just, who had been influenced by Rousseau, remained more optimistic than some of his revolutionary contemporaries.¹²⁰ In Saint-Just's opinion, the world was in-

¹¹⁷ See letter to Mirabeau, July 26, 1767, in Vaughan, *op. cit.*, II, 161-62. Rousseau denied that the so-called natural order of the physiocrats was self-evident, adding that even if it were, passion might prevent men from obeying its laws (*ibid.*, pp. 159-61). Cf. Mirabeau's letter to Rousseau, Chapter IV, above.

¹¹⁸ *Contrat social*, Bk. II, chap. x; Vaughan, *op. cit.*, II, 58-59. Climate and many other factors, Rousseau said, act in combination to fix the needs of a people (*ibid.*, pp. 59-60, also pp. 82-85). A civil state is impossible wherever the inhabitants can produce only their own bare subsistence (*ibid.*, p. 83). Revolt is very difficult in a sparsely settled state, less difficult in densely peopled states (*ibid.*, p. 86).

¹¹⁹ See Lichtenberger's full account of the doctrines of Mercier and Rétif, *op. cit.*, pp. 193-220.

¹²⁰ H. Roulleaux-Dugage has claimed that a conception of population pressure similar to that of Malthus was shared by certain French revolutionists (Baudet, Saint-André, Carrier, Antonelli, Geoffroy, Collot d'Herbois), who said that many millions would have to be killed (the figures range from several to more than fifteen millions) before a complete transformation of French society could be achieved (*Revue politique et parlementaire*, XCIV, 1918, 279). This claim is invalid. The revolutionists in question were not motivated by the fact that a new form of society could be maintained only if numbers were considerably reduced, but by the belief that large num-

adequately peopled. Where an excess population seemingly existed, it was the result of "sterility of administration" and not generally of "insufficiency of territory." Colonization and emigration were not so much proof of overpopulation as of "certain customs" which deprive men of work. Apparent population pressure was not an occasion for war. The earth could support a "prodigious number of inhabitants," presumably more than double the number then living. In view of the checks to population, numbers did not tend to exceed the capacity of countries to support them.¹²¹

bers would have to be destroyed before opposition to the revolution would disappear. Moreover, at least several of the men named by Roulleaux-Dugage were mentally unbalanced (F. P. Guizot, *The History of France*, VI, New York, 1885, 284; H. Taine, *Les origines de la France contemporaine*, VII, Paris, 1899, 337-41).

¹²¹ "It seems to me that population has its vicissitudes and limits in all countries, and that nature never has more children than she has breasts" (C. Vellay, *Saint-Just: œuvres complètes*, Paris, 1908, II, 499-501). The citations are from his *Fragments sur les institutions républicaines* (1794). Saint-Just, in his rules for the ideal state, declared that a couple need not declare marriage unless the woman became pregnant; that all couples who produced no children in seven years must be compelled by law to separate (*ibid.*, p. 520).

CHAPTER IX

CONCLUSIONS AND INTERPRETATION

I. THEORY AND IDEOLOGY

POPULATION theory, as formulated by the writers studied in this volume, comprises one or more of three distinct sets of propositions: (1) those concerning the effects of population growth and of variations in rate of population growth; (2) those concerning the causes, or determinants, of population growth and of variations in the rate of population growth; (3) those representing attitudes of approval and disapproval toward given demographic trends and policies. Propositions falling within categories (1) and (2) have always been more obviously descriptive of actual or supposed functional relationships than have propositions falling within the essentially normative and evaluative category (3); therefore, propositions of the types (1) and (2) have tended to be more impersonal and scientific in character than those of type (3).

Historical progress in the formulation of propositions falling within categories (1) and (2) has been conditioned immediately by progress in economic and sociological theory, and ultimately by progress in man's understanding of his biological and psychological makeup¹ and of the environment within which he finds himself. Propositions falling within category (3), while not completely independent of those falling under (1) and (2), reflect the value scheme or *Weltanschauung* of a people, in especial of its articulate elements, and gain or lose in importance as the value scheme changes. When the social structure has become stabilized and the *Weltanschauung* has become integrated and generally accepted, the articulate élite is in essential agreement on the significance and content of propositions of the (3) type; but when a society is undergoing substantial transformation, as was the case in eighteenth-century France, the value schemes of groups and individuals differ, and there is diversity in the eval-

¹ On this point see J. Mayer, *The Scientific Monthly*, XLVI (1938), 564-66.

uations made of given propositions under (3) and in the significance attached to them.

Prior to the closing third of the eighteenth century, French writers concerned with the subject of population and wages were handicapped by the lack of an adequate frame of reference in terms of which to organize the slowly growing body of demographic information and inferences based thereon. The newer views that had begun to appear at the turn of the century were elaborated and diffused; dynamic concepts and norms of use to exponents of the theory of progress were borrowed from Locke and the sensationalists, but the relevant facts, ideas, concepts, and values were not immediately separated out and bound into a new organon. In the second half of the century, however, the outlines of such a frame of reference began to appear, and men began to think in terms of resource growth and allocation, factor mobility, and interoccupational balance within a comparatively limited area or economy. This reference frame seems to have been derived from actual information concerning economic objects, events, and processes, and from the notions of equilibrium and equilibration developed in the physical sciences and in natural history. Such dynamic elements as were incorporated into this vaguely conceived reference frame were derived from sensationist psychology or based upon observations concerning the progressive character of applied science. The developments that took place in the formulation and organization of politico-economic principles and theories in the last half of the century suggest that even if Smith, Malthus, and Say had not written, an integrated body of doctrine would have evolved in the early nineteenth century. As it was, early nineteenth-century French political economy bore the stamp of the liberalism and optimism current in late eighteenth-century France.

Attitudes toward demographic trends and policies are affected by a number of factors. The degree to which such attitudes are overtly manifested is conditioned by the actual state of population growth and density. The content of the attitudes is shaped by the medium of cultural values in which a writer finds himself and by the existing state of knowledge regarding causes and effects of population growth. Norms are conditioned by the

general social situation and by the state of social science; they change as that situation is altered² and as men comprehend more fully the implications of that which they have been prizing.³ They change also in consequence of modifications in the class-origin, class-affinity, rural-urban orientation, and religious affiliation of the articulate portion of society, for the resulting redistribution of this élite often compels re-examination, reformulation, and sometimes recategorization of value principles and attitudes.⁴

Many circumstances operated to determine the content of eighteenth-century French population theory, and modifications in this content and in the fundamental attitudes of those who wrote about population. Most of the eighteenth-century writers belonged to the mobile, urban intelligentsia, and many were spokesmen for the rising bourgeoisie, and occasionally for the common man or for the interests of all men; in earlier periods writers were predominantly spokesmen for the church, the state, and the strategically situated minority, and even when they were not, couched their views in terms of the interests of state and church. The failure of absolutism and its agencies to provide economic security and protection against seemingly remediable ills served, more than any other factor, to shape the content and emphasis of French opinion concerning population. It accounted for the virulence of the attack upon religious celibacy which, having survived earlier criticisms by Protestant spokesmen, by the late seventeenth century apparently had come to symbolize a form of state-sanctioned parasitism. It contributed, even more than defective monetary policies, to the dissipation of the mercantilist scheme of values; and it led some theorists to emphasize, as did nineteenth-century liberals, the many-spheredness rather than, as in medieval times, the uni-spheredness of society and social life. It led the critics of absolutism to marshal against it sensationalist psychology and hedonistic ethics, together with a somewhat in-

² K. Mannheim, *Ideology and Utopia* (New York, 1936), pp. 72, 76; M. Sherif, *The Psychology of Social Norms* (New York, 1936).

³ John Dewey, *Theory of Valuation*, in *International Encyclopedia of Unified Science*, II, No. 4 (Chicago, 1939).

⁴ Mannheim, *op. cit.*, chap. v, and *Man and Society* (London, 1940), pp. 25-27, 92-96, 158-59, 183-84, 222, 241-42; R. K. Merton, "Karl Mannheim and the Sociology of Knowledge," *Journal of Liberal Religion*, II (1941).

consistent complex of natural rights and political and ethical utilitarianism; and to urge that since Nature is inherently harmonious, and reason can provide adequate rules of conduct, enlightened self-interest will insure the good of all so long as the role of government is limited to preserving liberty, security, and property. It led even those who distrusted reason and emphasized experience, or who preferred diversitarianism to rational simplicity and uniformity, or who wanted to organize societies along preconceived lines, or who believed that man's disposition to disregard the interests of his fellows must be forcibly held in check, to emphasize material and psychic well-being as the end of human activity and social organization. Hence no writer, whether or not he attached importance to population growth, disregarded the criterion of individual well-being. Nonetheless, it was only as general economic, sociological, and political knowledge cumulated in France and England that the nature of the relation between population trends and well-being came to be understood.

Wage theory evolved in much the same manner as population theory. The attitudes of writers on wage theory were shaped by the circumstances which molded attitudes toward demographic policy. Explanations of the determinants of wages in general, and of interemployment wage differences, improved *pari passu* with progress in economic analysis and in the amount of relevant factual information. As the control over economic life and conduct exercised by the church, by the state, and by agencies surviving from the medieval town economy diminished, it became necessary to discover new loci of wage- and income-determining forces; and these were sought within the psychological mechanisms of the representative individual and in the more or less competitive market milieu in which the individual lived.

II. THE LAWS OF RETURNS

None of the laws of returns received explicit treatment until the latter half of the century. Prior to, and even after, 1750, land and labor were looked upon as the main, if not the sole, factors of production; and the approach of a writer turned on the relative importance he attached to labor.

Widespread acceptance of the opinion that labor was by far

the most important of the factors⁵ of production accounts for the fact that population growth was so frequently looked upon as advantageous to the state; and that manufacturing, which, according to received opinion, embodied little else than labor, was conceived to be indefinitely extensible so long as subsistence could be obtained at home or abroad by the landless population. The greater the population, it was implied, the larger the amount of "surplus value" that could be appropriated by the state and converted into bullion or put to other uses by the small segment of the population most closely identified with the state. For in and before the seventeenth century, it apparently was believed that returns in manufacturing were constant under static conditions and subject to increase through invention, and that in so far as the same condition did not rule in agriculture, resulting inadequacies in the food supply could be offset by imports; it was not generally inferred that growth in numbers might eventually depress per capita output and wages. This view continued to have adherents in the eighteenth century, and was not repudiated until after 1750.

With the development after 1750 of the controversy over the relative merits of agriculture and manufacturing (see III), the nature of the laws of returns came to be recognized in part. Already at the turn of the century Vauban had implied that in the absence of improvements a point is reached when the total agricultural output of a country cannot be further increased; but neither he nor others who recognized this limit indicated whether per worker returns in agriculture remained constant until this limit was reached or began to diminish earlier. The physiocratic analysis in terms of the *tableau économique* was not suited to the discovery of laws of returns, particularly in fields other than agriculture. The physiocrats simply supposed French agriculture, in its then state of degradation, to be subject to increasing output per unit of labor input on condition that known principles of agronomic science were observed. Several of the physiocrats also implicitly postulated stages of constant and of decreasing returns per unit of labor input in agriculture; for they indicated that with

⁵ The importance attached to labor as a factor of production is evident in the continual emphasis placed upon the suppression of unemployment.

the extension of cultivation, recourse was had to poorer lands, the least fertile of which yielded only enough gross return to balance expenses other than taxation. Only Turgot explicitly differentiated the three stages of more than proportional, proportional, and less than proportional returns in agriculture. It may be said, nonetheless, that in the closing third of the eighteenth century all the more competent writers, physiocratic and nonphysiocratic, recognized that in the absence of further advances in agronomic science, there existed an upper limit to the total output of land, and that this limit was not susceptible of rapid elevation.

The laws of returns in manufacturing, when treated at all, were discussed with much less precision than those in agriculture. The physiocratic assumption of sterility in manufacturing and commerce precluded their thinking in terms of variable proportions in these fields. When Saint-Pierre, Moheau, and others referred to certain advantages associated with increased density of population, they apparently had in mind the beneficial effects of density upon manufacturing as such and upon that inter-individual mental stimulation whence technological progress proceeds; they did not convert their analysis into terms of division of labor, however, presumably because they did not appreciate its effects as Smith did. Throughout the eighteenth century the labor-saving and productivity-increasing effects of technological progress in manufactures were noticed, and writers occasionally were optimistic over the future of manufactures. In the latter part of the century, probably as a result of both the physiocratic analysis and Smith's observations, it was recognized that employment capacity and progress in manufactures were conditioned by the scope of the market and by the supply of "capital"; but capital was not clearly defined, no explicit laws of costs and returns were formulated for manufacturing, and the circumstances regulating the exchange value of exports were passed over lightly.

Although the discussion of the laws of returns usually was not integrated with that of population by either the physiocratic or the nonphysiocratic economists, their emphasis upon the dangers inherent in undue stimulation of population growth proceeded in part from their recognition of the limitations to yields in agriculture; possibly, too, some of them were influenced by

their awareness of the income-depressing effects of increasing unduly the ratio of agricultural workers to land. This emphasis was re-enforced by the belief that it was dangerous for a state to rely for part of its subsistence upon provisions purchased abroad with exported manufactures (see IV); in consequence, whatever their notions as to possibilities of expansion and improvement in manufactures, most of the late eighteenth-century writers did not see in the extension of manufacturing a satisfactory escape from a deficiency of means of support occasioned by too great a growth of population.

The laws of returns, in so far as they were understood by the French writers, were not effectively incorporated into their explanations of wages,⁶ even though some of them thought in terms of productivity and equilibrium. Herrenschwand, who emphasized the importance of the "capital": population ratio, failed to show *why* changes in this ratio affected wages, simply stating it as a fact that wages changed with modifications in the ratio. The physiocrats, the followers of Cantillon, and others were even less explicit, limiting their discussion of wage formation largely to terms of competition, demand, and the supply of means of work (or employment).

III. AGRICULTURE VERSUS MANUFACTURING

Prior to the eighteenth century, manufacturing was defended chiefly on bullionist and other mercantilistic grounds; it was considered more conducive to the realization of mercantilistic objectives because, as has been shown, it was believed to have greater possibilities of expansion than agriculture. In the eighteenth century, as population growth came to be looked upon as a consequence of the augmentation of subsistence, both agriculture and manufacturing were analyzed in terms of their effects upon the supply of subsistence. The artless agrarians were content to argue that since numbers depended upon subsistence, population would grow most rapidly under a system of small-farm agriculture that permitted the largest possible growth of the rural population.⁷

⁶ Auxiron is a partial exception.

⁷ A number of writers also pointed out, as had Sully and some of the medieval writers, that ruralists made the best soldiers. Most writers were vague in their treatment of the military effects of population growth. The writers who emphasized the

The more perceptive writers reasoned, however, that while numbers were dependent upon subsistence, population growth was governed ultimately by the factors and processes that made subsistence expand and become accessible to men; but they differed as to the nature of these factors and processes. On the whole, eighteenth-century writers either overlooked or greatly underestimated the mutuality of the relationship between agriculture and manufacturing; therefore they tended to treat one as the independent variable, and the other as the dependent variable, and to reason accordingly and fallaciously.

The physiocrats found the key to the growth and comfort of the population in the expansion of agriculture, the prime mover in the economy. French agriculture, they believed, was degraded and underdeveloped; it was potentially in the stage of increasing returns, and investment in it was capable of producing a better yield, from the national point of view, than investment in non-agricultural industry and commerce; it alone gave rise to a *produit net*, upon which depended the volume of employment and income available to the *stérile* nonagricultural classes. The growth and comfort of both the agricultural and the nonagricultural population therefore would be fostered, the physiocrats believed, by policies that conduced to the augmentation of the *produit net*. In fact, the growth of French manufacturing was very largely dependent upon the expansion of domestic agriculture, inasmuch as foreign markets for French manufactures were much more limited and precarious than were foreign markets for French agricultural products, and as French agriculture (whence issued the demand for French manufactures) was certain to expand under the impetus of adequate and continuous investment in farming. The physiocrats anticipated no deficiency or maldistribution of purchasing power so long as the rate of

military advantages of population growth were equally vague when discussing this relationship. They failed to consider the several ways in which the number of soldiers effectively utilizable by a sovereign was conditioned by the means of transportation and communication, by the nature of the weapons in use, by the strategy, tactics, and formations available in light of the existing state of weapons and military technology. The impression one gets is that the populationists were simply rendering lip service to the military ideal without understanding it. Cp. an account of changes in military methods (e.g., O. L. Spaulding and others, *Warfare*, Washington, 1937, Parts II-III) with the statements of those who defended population growth on military grounds.

investment in agriculture was maintained at a high enough level; for they supposed that the portion of the net product that was not reinvested in agriculture would automatically be spent for the goods and services of the *stérile* classes.

Cantillon and his followers did not accept any such automatic spending and expansionistic theory as permeated the physiocratic writings. They recognized that the volume of employment and the level of income accessible to propertyless men depend upon those who control the power of the purse. Moreover, unlike the naïve disciples of Say, and unlike the uncritical postulators of perfect competition, Cantillon and his followers observed that this power was concentrated in the hands of a few—the landed proprietors and the wealthy—in place of being diffused throughout the population; they noted further that in the existing circumstances those who then controlled the power of the purse exercised it principally, not as capitalists seeking profitable investments, but as consumers.⁸ Cantillon concluded, therefore, that the size of population and (under certain conditions) the level of comfort of the masses were fixed largely by the amount of subsistence that proprietors made available, directly and indirectly, for the employment of the propertyless masses. Several of Cantillon's followers reasoned further that the greater the variety and quantity of nonagricultural goods purchasable by the proprietors and the wealthy, the greater would be their incentive to expand agricultural production and thereby increase their power to buy nonagricultural products.

A third group of writers, whose approach was best represented by Herrenschwand, implicitly accepted the Cantillon thesis that agricultural production will expand only in proportion as those controlling agriculture have incentives to extend it. The members of this group reasoned, however, in contradistinction to the physiocrats and the Cantillon school, that manufacturing, rather than agriculture, is the prime mover; that since manufacturing

⁸ Cantillon's theory apparently was somewhat descriptive of prewar Spain, Poland, the Balkans, and the Mediterranean region, where great noble and monastic landlords exploited landless agriculturalists (P. F. Drucker, *Harper's Magazine*, CLXXVIII, 1939, 149-54; R. E. Crist, *The Scientific Monthly*, XLVII, 1939, 459-63; also H. D. Irvine, *The Making of Rural Europe*, New York, 1923).

creates the main demand for agricultural products, whatever tends to expand manufacturing will augment the demand for agricultural products, induce an expansion of the supply of subsistence, and thus foster population growth.

A fourth group of writers favored agriculture because they considered it conducive to the simple life and propagation; they opposed the development of manufacturing on the ground that it engendered luxury and produced other effects unfavorable to human happiness and population growth (see V). They did not treat either agriculture or manufacturing as the primary expansionistic force; nor did they especially emphasize expansionism. To the charge of members of this group that manufacturing promoted urbanization, which in turn was unfavorable to propagation, the exponents of manufacturing might have replied, in consistence with their premises, that manufacturing stimulates rural population growth in sufficient measure more than to offset the unfavorable effect of manufacturing and urbanization upon natural increase in cities.

IV. INTERNATIONAL TRADE

Prior to the eighteenth century, international commerce—i.e., essentially the exportation of manufactures—was appraised in terms of the mercantilist scheme of values; it was looked upon as favorable to the expansion of employment and population, but the exact nature of the relationship between international trade and demographic growth was not made clear. In the second half of the eighteenth century more explicit normative and scientific appraisals of the effects of commerce upon demography began to appear.

Whereas some exponents of commerce and manufactures were content to say that additional subsistence could, if needed, be obtained abroad in exchange for manufactures, Cantillon and his followers presented a more penetrating account of the effect of international trade upon the capacity of a country to support population. Population growth was limited *ceteris paribus* by subsistence, and the supply of subsistence was restricted *ceteris paribus* by the amount of land available for its production; therefore,

international commerce would augment a country's population capacity if it brought in a larger volume of the products of land than it carried out, and thereby swelled the supply of provisions or released land for the production of additional provisions. Specifically, if French wrought (or essentially labor-embodiment) goods were exchanged in the international market for foreign subsistence and raw materials, and if, in consequence, the supply of subsistence available to the French people was increased, international commerce favored population growth in France; if, on the contrary, French subsistence and other essentially land-embodiment products were exchanged for imported wrought goods that embodied relatively large amounts of foreign labor, and the supply of subsistence available to the French population was thereby reduced, then international trade was prejudicial to population growth in France. In the former situation the population of France increased at the expense of foreign nations; in the latter, foreign nations grew at the expense of France. In short, there existed an international fund of subsistence and raw materials, and the more a nation drew out of that fund, the larger might be its population, and, in consequence, the smaller would be the population of other nations.

Although a few writers apparently favored expanding the French population by exchanging manufactured goods for foodstuffs and raw materials, most of them were opposed to this policy. Pursuit of such a policy, while possibly advantageous to very small nations, such as Holland, would place France at the mercy of foreign countries; for the latter could at any time refuse either to purchase French manufactures or to supply subsistence. In either event, a portion of the French population would perish through lack of subsistence. The agrarian and the physiocratic writers argued, besides, that since French agriculture was so underdeveloped, France ought to rely upon her own agriculture for provisions; she ought not to import foreign provisions and thereby swell the foreign *produit net* at the expense of her own. The physiocrats asserted, further, that as long as French agriculture produced more than the domestic population could consume, and it remained possible to augment the *produit net* by exporting provisions, agricultural products should be exported;

for in proportion as the domestic *produit net* increased, French agriculture could be expanded and made capable of supporting an even larger *stérile* population at home. Most writers were agreed that the population of France should be as large as, but no larger than, could be supported at a designated (usually a "comfortable") level of existence by a fully developed French agriculture.⁹ Finally, some said that trade conduces to international peace and thus favors population growth, while others said trade generated luxury and war, and thus checked population growth.

The advantages of international specialization and its relation to population capacity were scarcely recognized. Writers generally thought in terms of surpluses of goods and services that had to be sold abroad, or that could be sold more advantageously abroad; they did not grasp the theory and implications of absolute and comparative international advantages. What is more important, they conceived of the objective scale of living of the bulk of the population primarily in terms of subsistence, and simple subsistence at that; therefore they tended to overlook the more general effects of international specialization. Had they postulated a varied, comfortable, and composite per capita scale of existence on part of the masses, they might have been driven to recognize that international specialization augments the actual and potential real incomes of nations and thus swells their population capacity. Had the French writers so much as postulated, not a simple cereal standard of subsistence, but a varied and composite food standard for the bulk of the population, they might have been compelled to note the advantages of international specialization in agriculture and its favorable effect upon well-being and population growth. As it was, they merely noted that foreign commerce added new commodities to a nation's consumption, but did not develop the theoretical implications of this observation for international agricultural specialization and national and international population growth.

⁹ Those writers who conceived of colonies as an important part of the national framework seem to have favored a population in France as large as could be supported by a fully developed French agriculture, plus the net influx of provisions from the French colonies.

V. LUXURY

The views on luxury¹⁰ varied widely; some were parts of the theories pertaining to the source of national power; some were mere attacks upon the democratization of consumption and living standards; some were defenses of manufacturing or of agriculture; and some were integral parts of population theories. Luxury was generally condemned by all writers who believed it could exist only on condition of marked inequality in the distribution of wealth and income; it was defended, on the other hand, by those who associated it principally with technological progress and laissez faire, and who believed that it would not be abused so long as government conformed to the "natural order."¹¹

Some writers described luxury as unfavorable to population growth; others, as favorable. Some argued that expenditures for luxury redistributed income and provided employment and thus favored population growth. Others, who had been influenced by Mandeville, looked upon the prospect of luxury as the incentive that would spur individuals to greater economic activity and generate conditions favorable to the expansion of employment and of population. The physiocrats contended that luxury was conducive to population growth only in so far as it augmented the demand for agricultural products. Cantillon argued *inter alia* that proprietors' tastes were unfavorable to population growth in proportion as they limited the amount of land under cultivation and restricted the supply of subsistence available for the employment and support of propertyless workers. Many condemned the multiplication of "factitious" wants, saying that men remained celibate or limited family size in order to satisfy such wants. Some said that the expansion of commerce and manufacturing could be sanctioned only up to the point where they provided employment for that part of the population which, while supportable by French agriculture, could not obtain employment on farms. The defenders of luxury increased in number in the

¹⁰ Summaries of the views on luxury have already been presented in Chapters IV and V.

¹¹ No one argued, as did Senior later, that those who fill the higher ranks of society can seldom perform their duties well "unless they conciliate the respect of the vulgar by a certain display of opulence" (N. Senior, *Political Economy*, London, 1863, p. 56).

eighteenth century, along with the expansion of manufactures, the growth of the bourgeoisie, and the development of vertical social mobility.

VI. DEPOPULATION AND REPOPULATIONISM

Governmental intervention for the purpose of stimulating population growth was defended before the eighteenth century by those who believed that such growth facilitated the achievement of mercantilist objectives; it was defended by many writers throughout the eighteenth century on mercantilist grounds and because state intervention was necessary in view of the alleged fact that the French population was growing slowly or not at all. Those who advocated state intervention outlined a great number of propopulationist proposals, the bulk of which were designed to penalize the celibates and the childless, to reward the more fertile parents, to reform the *mœurs*, and to remove certain alleged checks to population growth. These proposals were condemned by many writers in the last third of the eighteenth century, however, on the grounds that France was sufficiently populated and that her population naturally tended to grow as much as circumstances warranted. Nonetheless, it was not until after Malthus wrote that proposals to stimulate population growth fell (temporarily) into complete disrepute.

The belief that the population of France was not growing apparently originated in a combination of circumstances: the distressed state of agriculture at the close of the seventeenth century; rural depopulation in parts of France; the exodus of the persecuted Protestants; war losses in the latter part of the reign of Louis XIV; and reports of actual depopulation in parts of France. This belief was strengthened by Montesquieu's giving currency to the notion that many countries were less peopled than formerly;¹² it was seized upon by critics of social and economic conditions in mid-eighteenth-century France. But with the development of the argument that population naturally pro-

¹² The latter notion may have been precipitated by the seventeenth-century quarrel over the comparative merits of the ancients and the moderns. On this quarrel see Bury, *The Idea of Progress*, chap. iv. It is possible, too, that the observation of Spanish writers that population had diminished in Spain strengthened, if it did not give rise to, the fear of depopulation in France.

portions itself to subsistence, and the presentation of evidence to the effect that subsistence and numbers had increased since 1700, it was seldom charged that numbers were not growing.

VII. MALTHUSIANISM

In the course of the eighteenth century two opposed doctrines came into full flower: (1) the notion of cumulative cultural progress; (2) the view that subsistence is the measure of population. In the hands of Malthus and some of his disciples the latter view became metamorphosed into a counterrevolutionary antithesis designed to demolish the belief that the common man stood automatically to gain through revolution or through technological and other forms of progress. Malthus contended, among other things, in the first edition of his *Essay* (1798), that since population tends to increase in the same proportion as subsistence, population growth tends to consume the fruits of technological progress and to destroy such temporary benefits as the common man may derive from the revolutionary overthrow of existing rulers and institutions and the resultant redistribution of income.¹³ In the 1803 and later editions Malthus advanced more effectively the argument that poor relief tends to waste capital and at the same time to facilitate imprudent marriage and natural increase among the poor, and thus aggravates the very condition charity is supposed to alleviate; and that the common man can better his lot, in so far as it is improvable at all, chiefly through the practice of moral restraint.

Eighteenth-century French writers, although frequently aware of the tendency to overpopulation and of its ill effects, contributed greatly to the formulation of the optimistic thesis, but not so much to that of the pessimistic antithesis. By the close of the seventeenth century the conditions necessary to the development of the idea of progress had come into being in France. Labor and industry were somewhat respected. Certain of the intelligentsia had liberated themselves from the trammels of the ancients and of the church fathers. Secular thought was coming

¹³ Malthus was careful to point out that the principle of population is beneficent, inasmuch as it spurs naturally lazy man to work and sharpens his faculties. This aspect of Malthus' doctrine was not anticipated by French writers and was not adopted by French disciples of Malthus.

into its own. Descartes, Newton, and others had made it evident that nature is invariable in her physical operations, and this doctrine was carried over into the field of human affairs and used to dislodge from this domain that capricious and appeasable Providence which had so long dominated it. Favored by the existence of these necessary preconditions, Fontenelle and the Abbé de Saint-Pierre were able to educe a theory of cumulative progress from the observations of earlier writers and the implications of the scientific discoveries and developments under way. Turgot developed the idea of progress somewhat further. Melon, Voltaire (particularly in his historical works), Chastellux, the philosophes, the physiocrats (to some extent), S. Mercier, and others not only gave currency to this new doctrine, but also undermined the obstacles in the way of its spread. Moreover, with the growth and diffusion of the doctrine, its exponents became progressively more interested in the mundane future of mankind.¹⁴

The exponents of the doctrine of progress held in general that the good life on earth is the end of this worldly existence; that man is not depraved by nature but is capable, in virtue of his ability to reason and profit from experience, of perfecting life on earth. Reasoning on the basis of the psychology of Locke and Condillac that man is a product of his environment, and that his material and spiritual condition can be improved continually and immeasurably through the appropriate reshaping of his environment, the apostles of progress emphasized the need of destroying arbitrary and oppressive government and of freeing men's minds of ignorance and superstition. Presumably, in proportion as man's environment was improved, both his capacity as a producer of material goods and his ability to shape his behavior in accordance with the dictates of the beneficent laws of nature would expand; wherefore his numbers would tend to assume such size as would maximize individual and collective welfare. Such, in brief, were the implications of the thesis of cumulative progress.

Of the contrary Malthusian antithesis, however, there were

¹⁴ On the origin and development of the idea of progress see J. B. Bury, *The Idea of Progress*; J. Delvaile, *Essai sur l'histoire de l'idée de progrès*; C. L. Becker, *The Heavenly City of the Eighteenth-Century Philosophers* (New Haven, 1932); K. Martin, *French Liberal Thought*, Part IV. See also sec. x, below.

many anticipations but no explicit statement in nineteenth-century Malthusian terms. To some extent before 1750 and quite generally after 1750, it was believed that population tends to grow in proportion as subsistence is obtainable through labor; that population growth cannot be effectively encouraged by means other than the provision of employment and subsistence; and that population growth should not and need not be stimulated. A number of writers even indicated that population tends to grow to and beyond the limits of subsistence. Nevertheless, no French writers—not even those who emphasized (as did Buffon) the biological, rather than the cultural, determinants of population growth—reasoned as explicitly as the Scotchman Wallace, that a country would *inevitably* become “overstocked” with inhabitants, were its “government” to become “perfect” (i.e., communistic and Utopian) and the many man-made obstacles to natural increase to disappear.¹⁵ One encounters no reference to this thesis of Wallace in the works of French writers on population, not even in the works of those who referred to his earlier work, or who criticized the populationists and warned against undue population growth. In the French discussions of poor relief there is much criticism of forms of relief but (with the partial exception of the Comité de Mendicité) no explicit recognition of the thesis subscribed to by Arthur Young and later developed by Malthus, that the extension of charity to the fecund poor augments their marriage rate, rouses their multiplicative capacity, and thus swells their number; nor is there widespread recognition of the Malthusian thesis that population pressure is the fundamental cause of mass poverty. In short, population pressure was sometimes viewed as a source of poverty; charity was condemned on the ground that it wasted resources and fostered idleness; increase in the supply of workers was at times viewed as a cause of unemployment and of reductions in wages; and it was said that war and other positive checks were not necessary to prevent overpopulation; but the Malthusian thesis was not clearly posited and evaluated until the closing decade of the century. Then Con-

¹⁵ Robert Wallace, *Various Prospects of Mankind, Nature, and Providence* (London, 1761), pp. 114-19. Already in his *Dissertation on the Numbers in Ancient and Modern Times* (Edinburgh, 1753), pp. 1-13, Wallace had dwelt upon the great natural capacity of man to multiply in the absence of obstacles.

dorcet, in his outline of the future progress of the human race, raised the possibility of eventual population pressure only to assert that if such pressure ever threatened, enlightened man would take whatever steps were necessary to prevent it.

It is not easy to account for the failure of French writers to posit the Malthusian antithesis, if only to refute it, particularly in light of their acceptance of the view that population growth is conditioned when not determined by subsistence, and that population sometimes presses upon the means of employment or tends to outstrip subsistence. This failure was not due to the fact that the French writers believed the preventive checks, of whose importance they were more aware than Malthus, to be adequate to avert population pressure, for none emphasized the beneficial character of the checks, some disapproved of certain of them, and several pointed to colonization as the only ultimate escape from population pressure. The real reason for this failure appears to lie in the supposition that any real threat from population pressure lay in the future, and in the fact that the principal subject of inquiry was always, not the population problem as such, but the discovery and diffusion of means whereby absolutism and its concomitant evils might be dissolved. Most French writers were critical of the existing institutional framework, and found the principal cause of the prevailing mass poverty and other ills in the deviation of this framework from the precepts of the beneficent natural order; they believed, moreover, that as men reshaped their institutions in harmony with the natural order they would eliminate existing poverty and remove the conditions that gave rise to it, including presumably persistent population pressure. In short, having approached the population question as they did, it did not occur to them to ask the question which disturbed Wallace and Malthus.

VIII. OPTIMUM THEORY

The notion that the population of a state should be of economic optimum size—i.e., no greater than is consistent with the maximization of either per capita income or per capita welfare—could not develop until something was known of the laws of returns. So long as it was supposed that total output and income

grew at the same rate as the population, increasing density could not be pointed to as a possible cause of increased misery for mankind. For then, on the assumption of something like an even distribution of income, the lot of each person remained as satisfactory as possible, regardless of the rate of population growth. On the contrary assumption of nondemocratic government and very unequal distribution of income, population growth became a source of disadvantage to the common man, and of advantage to the governing, proprietary, and ancillary classes, whose numbers increased less rapidly than those of the producing masses; for in this situation the "surplus value" susceptible of appropriation by the strategically situated overlord groups increased in much the same proportion as the mass of the population and therefore in greater proportion than the groups receiving the "surplus value." Consequently, not until it was discovered that total output does not necessarily keep pace with continuous population growth, was it possible to make a universally acceptable case against such unrestricted growth.

What is more important, the notion of an optimum population could not develop until a propitious scheme of social values had developed; for that notion is essentially this-worldly, individualistic, democratic, and humanitarian in character. Medieval writers, interested in frustrating the world, the flesh, and the devil, could not consistently think in terms of an economic optimum. This concept was equally incomprehensible and repugnant to men like Colbert and the overlords who supposed that the great mass of the population existed only to breed, fight, and labor for the advantage of the totalitarian hypostasis, *L'état*, and its component beneficiaries. Even had Colbert and spokesmen for the beneficiaries of exploitation been aware of the tendency of average and incremental returns to diminish, they would have favored population growth up to the point where the appropriate "surplus value" or rent was at a maximum.¹⁶ Therefore, not even vague notions of an optimum population appeared until men who were imbued with the slowly developing humanitarian,

¹⁶ Of this we have evidence in the frequent assertions that the masses were useful only in proportion as they were employed, or utilized for military purposes. The French populationists desired, not numbers as such, but satisfactorily *employed* numbers.

personal, and individual values had become articulate and had recognized in some measure the tendency of returns in agriculture to be limited or subject to decrease.

In the second half of the eighteenth century it was frequently asserted that undue population growth was undesirable because it was prejudicial to the welfare of the common man, some proponents of this view (e.g., Quesnay) adding that even the interests of the state as such would be injured by excessive population growth. No one explicitly advocated the maintenance of population at a size consistent with the maximization of per capita income. Many who held the lower classes in only qualified esteem (e.g., the physiocrats, the philosophes), however, insisted that it was socially undesirable for population to grow to the point where the minimum level of comfort to which the common man was entitled would be jeopardized. Those who desired both a reform of the basic economic institutions of France and the preservation of a comparatively simple mode of life apparently favored a population as large as was consistent with the maintenance and preservation of this type of existence. In general, it may be said that most post-1750 French writers favored a population consistent with the preservation of a not well-defined minimum comfort level of existence in the lower classes, rather than a population of such size as would maximize per capita income; therefore they condemned populationists who clamored for numbers, but they did not preach moral restraint or birth control.¹⁷

IX. WAGES

Eighteenth-century French wage theory may be described in terms either of its normative content or of its adequacy as an explanation of wage formation. With respect to the former, it may be said that the attitude of many eighteenth-century writers toward the wage-earning class differed decidedly from that prev-

¹⁷ As has been noted in various parts of this volume, family size was consciously limited in the eighteenth century. One of the characters in G. T. de Valentine's play, *Le Franc-bourgeois* ([1706], Act III, scene 1), says that it is better to have fewer children and conserve one's wealth. J. Aynard (*La bourgeoisie française*, Paris, 1934, pp. 290-91) states that this is the earliest recommendation of family limitation for economic reasons which he encountered in his researches.

alent¹⁸ in preceding centuries when workers were commonly looked upon as mules who tended to be most useful when subjected to low wage rates and hard treatment. The eighteenth-century writers were opposed on humanitarian grounds to limiting wages to mere subsistence. Some assumed that the worker was entitled to more, either because they supposed he was being exploited, or because they considered him to have a right to share in the fruits of progress. Others supposed that the worker tended to put forth more effort under the impetus of higher wages and the prospect of receiving something in excess of subsistence; but they failed to show that in a competitive economy entrepreneurs would be driven to act on this principle.

The form assumed by the various eighteenth-century wage theories apparently was conditioned by the wage theorists' conceptions of the then prevailing class structure of society. Nearly all the French writers reasoned in terms of a great propertyless mass of workers, on the one hand, and a powerful set of property-owners and employers, on the other; therefore many of them implied or asserted that men could not generally enjoy liberty and security unless the prevailing economic inequality was diminished and the ownership of property was widely diffused. What is peculiar to eighteenth-century French wage theory in contradistinction to English theory is the much greater emphasis placed by the French writers upon the role of the property-owner than upon that of the capitalist-entrepreneur in the nation's productive and distributive setup. Nevertheless, in certain of their essentials, the nonexploitation French wage theories resemble that developed by the English classical school; moreover, the main criticisms which have been directed against English classical wage theory are wholly applicable to the nonexploitation French wage theories and partly applicable to the exploitation wage theories.¹⁹

Eighteenth-century French wage theories, other than the essentially monetary wage and employment theories developed

¹⁸ However, in France under the *ancien régime*, De Tocqueville observed, the members of the upper classes were unable to conceive of the suffering in the lower classes (*Democracy in America*, trans. H. Reeve, London, 1840, IV, 3-8).

¹⁹ See F. H. Knight's excellent analysis of classical wage theory in *The Canadian Journal of Economic and Political Science*, I (1935), 184-96.

by the monetary mercantilists, fall roughly into two classes: the exploitation, or "force" theories, and the superficially competitive, nonexploitation theories. The proponents of the former type of theory supposed, somewhat as did Marx later, that society consisted of two principal groups: the helpless, propertyless proletariat who were able to secure subsistence only through sale of their labor, and the wealthy owners of property (chiefly landed) who determined the conditions and volume of employment and the level of remuneration obtainable by the propertyless workers. Although the exponents of the "force" theory did not make clear the position and role of those members of a society who did not fall into either of these two groups, it is to be inferred that their condition approximated that of one or the other of the two main groups. According to the "force" theory, wages and working conditions were governed, not by employer competition, but by employer fiat; and employers, when not compelled by the state to offer more, paid workers only the barest subsistence, with the result that the lot of the bulk of the working population was more wretched than that of a serf or slave or domestic animal. The proponents of this theory did not explicitly postulate employer collusion or the existence of an industrial reserve army in the Marxian sense; they supposed rather that despite the lowness of the wage level, the procreative urge in the miserable classes remained strong enough to keep the employing classes supplied with as many workers as were needed. The need of employers for labor was not formulated with precision, however; for had employers acted rationally in the circumstances postulated, they would have subsisted their workers on the same basis as domestic animals, and increased the number of workers employed up to the point where the "surplus value" or net product of the working population could not be further increased.

The distinguishing characteristic of the nonexploitation wage theory was the belief of its exponents that wages were determined by the play of impersonal forces that comprise a competitive market, and not by employer fiat. As will be seen, the theorists were not able to build this doctrine upon a completely tenable foundation, and they tended in practice to subscribe to both a vaguely formulated subsistence theory and a partial exploitation

theory; yet they generally reasoned as if wage levels were largely immune to direct control by the government or other bodies.

The fundamental errors of the eighteenth-century wage theorists—in particular, of the exponents of nonexploitation wage theories, to the description and appraisal of which the rest of this section will be devoted—are similar to those of the English classical school. The French writers were unable to locate with precision the source of the demand for labor in general and for particular kinds of labor; moreover, they failed to formulate a theory of competition general enough to account for wage determination by impersonal forces in a perfectly competitive market. Three conditions appear to have been responsible for their inability to develop an adequate competitive theory of wages: (1) an implicit stereotyped presupposition that wages consist principally of subsistence and slightly fabricated raw materials;²⁰ (2) failure to recognize that the price (or income) of each unit of each category of productive factors was determined, as were the prices of finished goods, by the operation of impersonal forces in a competitive market; (3) the fact that the laws of returns were not yet developed enough to permit theorists to think in terms of diminishing marginal value productivity and the effect upon the total value output (either of an individual producer, or of an industry, or of the total economy) of the addition of successive increments of labor.²¹ Furthermore, the French writers who recognized that invention, “capital” accumulation, and division of labor tended to raise total and per capita income, did not grasp the nature of the mechanism (or set of relations) in terms of which these conditions affected the level and distribution of income. In short, while a number of French writers were aware that per worker productivity influences wages, they

²⁰ Those who recognized that laborers work for one another and create a demand for the products of one another did not trace out the effects of this relationship and show that in proportion as workers demanded products embodying relatively large amounts of labor, rather than products embodying relatively small amounts of labor, they tended to raise the demand curve for labor. For this failure on the part of the writers in question, a too great emphasis upon subsistence and a subsistence fund appears partly responsible. As Mannheim shows (*Ideology*, p. 72), “thought is bound by the social- and life-situation in which it arises.” See also *ibid.*, pp. 243-50.

²¹ Even those writers who pointed out in respect to population growth that additional increments of population represented additional increments of productive power and products, failed to transmute this principle into a productivity theory of wages.

were unable to convert this observation into a competitive productivity theory of wages.

In most of the French discussions of wages there lurked some sort of wages fund out of which labor was remunerated. The French writers did not employ the term "wages fund" or an equivalent; but they implied its existence, even though they were not wholly agreed as to its content.²² According to Cantillon and his followers, the wages fund of the propertyless workers consisted of the supply of subsistence that remained after the proprietors' personal subsistence requirements had been met. According to the physiocrats, the wages fund of the sterile classes consisted of that part of the gross revenue of the *productive* class which was spent with the *sterile* class, or which was transferred to the proprietors, the sovereign, and tithe-receivers, and disbursed by these recipients to the sterile class.²³ The monetary mercantilists believed the size of the wages fund to be governed by the amount of money in circulation. According to the Comité de Mendicité, the size of the fund depended upon the rate of investment in various lines of enterprise. Herrenschwand, apparently following Smith, asserted that wages and employment were dependent upon "capital," but did not carefully define the latter or indicate the nature of this dependence. A number of French writers who were not explicit on the matter apparently thought of the wages fund as consisting of the provisions which the proprietary class controlled but did not require for its support.

²² According to the English classical school, the capitalist-entrepreneur, having paid rent on the Ricardian principle, set aside a portion of the annual produce-less-rent in the form of a "wages fund" for the hire of labor. Theoretically, the wage rate was arrived at by dividing into this fund the number of workers to be employed by it. Actually, the English writers assumed the wage rate to be high enough to provide slightly more than subsistence, but did not explain this result fully in terms of the fund.

²³ Quesnay postulated a state in which agriculture was fully developed. Here two billion were annually invested in the cultivation of the soil, and yielded 250 per cent, or an annual product of five billion. Of this five billion, two billion (= "*produit net ou revenu*") went to the proprietors, the sovereign, and the tithe-receivers. The proprietors, sovereign, and tithe-receivers disbursed one of their two billions to the *sterile* class, and the other to the *productive* cultivating class. The *sterile* class spent their two billion (received from the *productive* class and from the proprietors, etc.) with the *productive* class, one billion for subsistence and one billion to replace the raw materials consumed in the making of the two billions of fabricated products sold each year to the other classes (Quesnay's *Analyse du tableau économique*, in Oncken, pp. 309-17).

The French writers usually claimed that wages were governed by impersonal competitive forces, by supply and demand. To make this claim consistent with their theory of some kind of wages fund, it was necessary for the French writers to make their fund theory meet certain preconditions.²⁴ They needed to show, *inter alia*, that: (1) the size of the wages fund is independent of the action of any employer or proprietor, being determined by the same impersonal forces which make pawns equally of workers and employers; (2) all wages are conditioned by this fund, the supply of labor being considered constant; (3) each possessor of a fraction of this fund competes with each other such possessor for the services of labor in such manner as to exhaust the fund, employ all persons seeking work, and establish an *average* wage equal to the quotient of the fund divided by the supply of labor; (4) the relative volume of expenditure for each category of labor is such as to equate the utility (or productivity) return per marginal money unit spent on each category of labor;²⁵ (5) the wage rates for all categories of labor are identical, on the supposition of perfect intercategory mobility, and (most probably) non-identical, on the assumption of imperfect intercategory mobility.

The implicit wages fund theories of the French writers did not meet all the tests laid down.²⁶ Most important of all, the first condition was not met. The French writers not only looked upon the wages fund as a variable quantity, but also supposed it to be susceptible of variation at the will of the proprietor; moreover, they did not explain this variation in terms of rational economic motivation. According to Cantillon and his followers, the wages fund varied inversely with the personal subsistence requirements of the proprietors, and directly with the amount of land that the latter caused, or permitted, to be used for production of provisions.

²⁴ This obligation was not recognized by the French writers, for as yet economic reasoning had not become as rigorous as it was to become a century later. Improvements in economic thinking in the eighteenth and early nineteenth centuries proceeded far more than today from the clashing of opposite points of view.

²⁵ Those writers who thought in terms of utility, as did Condillac, or in terms of interoccupational balance, as did Turgot at times, clearly recognized the equilibrating process.

²⁶ Those writers who did not even try to think in terms of a general demand for labor were in a worse position still, for in the absence of such a concept they could not begin to explain wage formation.

The physiocrats indicated that if too large a proportion of the *produit net* was ultimately diverted to the support of the *sterile* class and too small a proportion of the income of the latter class was redibursed to the *productive* class, the rate of investment in agriculture would be reduced and, in consequence, the ensuing net product would diminish in size.²⁷ Other writers, who were less explicit than Cantillon and the physiocrats, implied that the wages fund available for the employment of propertyless workers could, within limits, be larger or smaller according as those who controlled the subsistence or the pecuniary fund of the nation were disposed to use more or less of it for the hire and support of workers. It follows, since the fund was conceived to be variable at the will of the proprietors, that wages were not set by completely impersonal forces; and this was recognized by Cantillon and others who, despite their assertion of the power of competition, implied that workers and proprietors did not bargain on even terms, and that the latter could definitely influence wages.

Conditions (2)-(4) were likewise not fully met. All failed in some respect to meet condition (2), for no one made the fund absolutely coextensive with that part of the population which derived all or some of its income from labor. For example, the physiocrats did not make wage of agricultural labor contingent upon the relative size of the fund; they postulated a fixed quantum of subsistence for each member of the productive class and added thereto the fixed quantum of goods secured from the *sterile* class in accordance with the principle of division presupposed in the *tableau économique*. Criticisms of a similar order may be directed against other fund concepts, for at best they ignored incomes partly derived from labor. Although a number of writers apparently supposed condition (3), they were

²⁷ For example, on the basis of the data given by Quesnay (n. 23 above), two billion must be invested in agriculture each year to maintain the annual product of five billion. Were the proprietors, etc., to spend less than a billion with the *productive* class and more than a billion with the *sterile* class, and were the latter to spend only two billion with the *productive* class, the gross income of the *productive* class would be reduced; in consequence, the "annual advances" of the productive class would fall below two billion and the annual total and net products would shrink at least proportionally. The English writers, who expressed fear lest not enough of the capitalist-entrepreneurs' produce-less-rent would be "destined" for the hire and support of "productive" labor, reasoned in a manner analogous to that of the physiocrats.

not at pains to show that on the assumption of a low wage (say one just high enough to keep the working population stationary), less than the available fund might suffice for the employment of the entire working population, with the result that the proprietors and employers could reduce the size of the fund available for the employment of labor. Condition (5) was not fully recognized, both because (4) was not fully understood and because the nature and the source of the demand for specific categories of labor were not fully grasped. It was simply observed that a small number of workers earned more than did agricultural laborers and most artisans and domestics—i.e., a supra-average and supra-subsistence wage. The excess earnings of these better-paid workers were explained in terms of their skill, ability, responsibility, education, imperfect competition, and so on; yet only some of the writers clearly recognized that these traits and conditions served to elevate the wages of the workers in question by intensifying their relative scarcity.²⁸

The eighteenth-century writers, in short, were unable to demonstrate, even within the framework of their several cumbersome wages funds, that wages were determined solely by competition; and they were aware of their failure, despite their lip adherence to competition. For this failure they are not to be condemned. Wages were not then determined under conditions of perfect competition, and the eighteenth-century theorists often recognized this fact, even though they did not always make their intended theories square with the fact. Inasmuch as the eighteenth-century theorists were as interested in attacking imperfections in the competitive process as in explaining how wages were determined in theory and fact, they never sharply separated description and theory; wherefore it is not possible for the modern reader to isolate satisfactorily the actual drifts of the eighteenth-century arguments.

On the supply side, inconsistencies and lack of precision were equally evident. Many writers took it for granted that the wages of the bulk of the population sufficed only for the essentials of

²⁸ The physiocrats were compelled, since they argued that workers in the *sterile* class earned nothing in addition to their support, to explain income in excess of the means of existence in terms of imperfect competition, need of liquidating cost of education, and the like.

life, and that the money cost of these essentials governed the money wage. This belief is evident in the discussion of the relation between the price of grain and money wages, in the supposition that taxes on provisions or wage incomes would not be borne by the workers, in the argument that wages were higher in urban than in rural areas because both the money cost of necessities and the workers' objective scale of existence were higher in cities, and in many direct statements to the effect that wages tend to coincide with the "natural" price of labor.²⁹ The French writers failed to define accurately what they meant by the essentials or support of life, or to describe satisfactorily the manner in which money wages were restricted to the sum of the outlays for these essentials.

The content of the concept, "necessary support of labor," may have a variety of meanings. It may refer either to the bare essentials of existence, or to the essentials plus something else, of: (1) the individual worker; (2) a worker's family of a size just sufficient to maintain the size of the population and the labor force at a stationary level; (3) a worker's family of a size sufficient to permit some population growth. It may be supposed that the wage, whatever it is, is paid only during the period that the worker is employed;³⁰ or that the sum of the wage payments received by workers when employed suffices on an average to supply budgets (1), or (2), or (3) each year of the laborer's working lifetime, or each year of his post-childhood period of life. Again, it may be supposed that the content of the worker's budget, however defined, remains constant, or that it expands through time at some definite rate, or that it oscillates about either a constant or a rising level, or that it tends to decline within limits. The French writers never clearly defined the content of the concept, "necessary support of labor." Many of them supposed, however, that the objective scale of existence tended to rise, and a number of them tried to explain why and how both

²⁹ Condillac even observed, much as did Mill and Ricardo later, that the number of profit-receivers or entrepreneurs tends to remain intact or to increase only on condition that their incomes remain sufficiently high to supply them and their families with something in addition to the essentials of life.

³⁰ This definition at once rules out (2) and (3) above. In fact, any form of (1) must be ruled out for the labor force as a whole unless it is assumed that this force is dying out.

the objective and the subjective standards of living do expand. Some of them supposed, moreover, that the actual budgets of many workers included more than the bare essentials for families of sufficient size to permit population growth. Nonetheless, some of the very writers who supposed these higher objective scales of existence, at times wrote as if they believed wages to suffice only for the needs, however defined, of the individual worker.

The mechanism whereby wages were kept on a par with an assumed objective scale of existence was not generally made plain. The eighteenth-century writers often tended to overlook the adjustment period that had to elapse before the supply of labor decreased in response to a diminution in the wages fund, or the "demand" for labor.³¹ Had labor been receiving only the barest essentials, or had labor had the alternative of employment in a foreign land, such rapidity of adjustment would have been conceivable; for in the latter case some of the workers would have emigrated, and in the former some would have been destroyed in short order by extreme poverty and its concomitants. Actually, no foreign alternative was presupposed. Consequently, since labor was assumed to have been receiving a wage in excess of bare subsistence, its supply would have remained constant for a while in the face of a diminution in the real wage level. This was recognized by certain critics of the physiocrats, who said that money wages would not rise by the amount of an increase in the price of provisions until the supply of labor had been reduced by misery and other checks.³²

The eighteenth-century writers failed also to make clear what would be the effect of an increase in the wages fund, or "demand" for labor. Generally they supposed that wages would rise at first, but they did not explicitly indicate that wages would rise by as much as the increase in the wages fund permitted in theory. If they did not believe that wages rose by as much as the theory

³¹ The physiocrats in particular were guilty of this oversight, for their preconceptions compelled them to postulate an instantaneous diminution in the supply of labor when the level of real wages fell.

³² This point was also recognized by certain writers who said that the marriage rate and fertility would fall, but who failed to indicate that a diminution in natural increase could exercise no effect upon the supply of labor for some years to come.

called for, they were either inconsistent in their reasoning, or they implicitly postulated the existence of a domestic industrial reserve army, or they really supposed that employers were able to exploit labor and not pay as much as the fund theory indicated. There runs through all the eighteenth-century writings a strong impression that when wages increased, population increased and operated to push wages back toward the prior level. This impression was generally accompanied by two false suppositions: (1) that the number of workers increased rapidly; (2) that new increments of labor did not add to the wages fund. The former supposition overlooked the fact that natural increase could not mature into labor increase for some years. The second notion grew out of the failure of the eighteenth-century writers to integrate the laws of returns with their concepts of a wages fund.³³

As has several times been suggested, the wage theories of the eighteenth-century writers reflect both the prevailing class structure of society and the complete inadequacy of the conceptual apparatus utilized by these writers. Their observations were fairly descriptive of the factual situation, but failed, even as did the English classical theory, to explain or account for the existence of the observed factual situation. Not until late in the nineteenth century, following the development of more utilizable concepts and the employment of at least quasi-mathematical reasoning, did the principal errors of the French eighteenth-century writers disappear from both wage theory and population theory.

X. ORIGINS AND DEVELOPMENT

We have not dealt in detail with the sources and order of development of French thought on population and related theory inasmuch as the sources are seldom easy to identify, and as our primary interest has been in the patterns of thought of writers representing various schools of opinion. Furthermore, the two main strains of thought—the optimistic and the pessimistic—

³³ Some writers supposed that wages tended to increase as the relative supply of labor fell, or the relative number of proprietors increased. Since they did not base this reasoning upon the supposition that as the labor supply diminished, the incremental output of labor increased, they must have supposed either that the conditions making for labor exploitation were weakened by a diminution in the labor supply, or that the fund was divided among fewer workers.

pertaining to relations between individuals and to relations between the individual and the community, did not, in the course of the eighteenth century, evolve in the same orderly fashion as (e.g.) post-eighteenth-century physics³⁴ and become merged into a new and internally consistent higher synthesis; for changes in the social situation affected the forms of thought and made more difficult the task of synthesizing disparate value schemes and theories of human behavior.

Much of the spirit and content of the two strains in French thought resembled, even when it did not stem from, English thought. This resemblance is due to the double fact that the influence of English upon French thinkers apparently was much greater than that of French upon English thinkers in the late seventeenth and eighteenth centuries; and that bodies of social theory which initially are similar tend, in consequence of the developmental tendencies immanent in such bodies of theory, to evolve in similar ways and directions.³⁵ Resemblances in general content and spirit stand out more prominently, however, than resemblances in order of development, probably because in England the question at issue was posed earlier, and attempts at its resolution were less subject to the sway of social turmoil and conflict.

The two strains in eighteenth-century French thought—i.e., the Malthusian and the anti-Malthusian described in Section VII—parallel in their nature and development the two strains in eighteenth-century English thought that stemmed, respectively, from Hobbes and Locke. Hobbes reasoned substantially as follows: given (1) that men are governed by passions, the satisfaction of which is pursued rationally and hopefully; (2) that the objects of men's passions or desires are limited relative to the demand of men for these objects; and (3) that force and fraud are efficient and unprohibited means to the pursuit of individual ends: then societies of men are necessarily shot through with strife, struggle, exploitation, instability, and chaos. The only bulwark against this unrelenting and unlimited interhuman struggle

³⁴ A. Einstein and L. Infeld, *The Evolution of Physics* (New York, 1939).

³⁵ Talcott Parsons, in his penetrating *Structure of Social Action* (New York, 1937), treats, among other things, immanent developmental tendencies within bodies of social theory.

and its inevitable concomitants consisted, in Hobbes's opinion, in the limitation, through the establishment of a strong and centralized government, of the recourse, by individuals, to force and fraud as means to the satisfaction of their passions.

Locke's view, which had been influenced by medieval tradition, resembled that of Hobbes in certain details but differed in respect to fundamental assumptions and ultimate conclusions. For although he agreed with Hobbes that 'society is a collection of discrete individuals, each of whom tends to pursue his own ends rationally and independently of his fellows, Locke avoided the conclusion that in the absence of a strong government unremitting interhuman struggle would be the lot of society. Locke escaped the full force of Hobbes's assumption (2) by supposing that there was no scarcity of land, and that labor is responsible (in the imputational sense) for more than nine tenths of all production. More important, he defined reason and the rational pursuit of individual ends in such a manner as to imply the existence of a natural identity of interests between individuals and between the individual and the community. Man's reason, Locke supposed, leads him to recognize that if each individual employs, in the pursuit of his ends, any and all means, whether or no they seriously disadvantage or harm his fellows, the resulting strife and chaos will prevent each and all from realizing these ends as fully as they may be realized; therefore each individual stands willing, in consequence of the dictates of his rational faculty, to make concessions to his fellows in order that the ends of each and all may be more fully realized. Wherefore, in Locke's scheme, order and strong government occupied a much less important position than in Hobbes's scheme, and there was a basis for anticipating a society relatively free of strife and of strong government and congenial to the improvement of man's lot.

As Parsons has shown,³⁶ Locke's postulate of the identity of men's interests was transmuted into the assumption that nature

³⁶ *Op. cit.*, pp. 102-05. In our account of the development of doctrine in England, we follow Parsons (*ibid.*, pp. 87-125), Sabine (*History of Political Theory*, chaps. xxii-xxiii, xxvi-xxvii), and Commons (*op. cit.*, pp. 13-52, 140-50). On the decline of Lockian political theory see H. V. S. Ogden, *American Historical Review*, XLVI (1941), 21-44.

is normative, and support for this latter assumption was inferred from the actual conditions of existence and from trends in their development. Accordingly, a philosophical foundation was established for either the belief that there existed a meliorative trend in social evolution, or the supposition that such a trend could be established by abolishing all human institutions which prevented the meliorative tendency in nature from manifesting itself. Furthermore, there was established a climate of opinion congenial to the Helvetian-Benthamite theory of human behavior and social legislation, and to the growth and diffusion of an optimistic philosophy and hope-laden forecast of the future such as permeated the writings of Godwin, Condorcet, and their immediate forerunners.

The Lockian postulate of the essential identity of human interests may be said to have dominated English thought until Malthus reformulated the Hobbesian doctrine in a fashion suited both to refute the optimistic philosophy associated with the names of Godwin and Condorcet and to repel the attacks of reformers upon the prevailing institutions. Even before Malthus, Hume had repudiated both the "selfish system of morals" and the doctrine of identity of interests, and had asserted that there existed a scarcity of opportunities. The tendency of this scarcity to result in conflicts of interests was largely restrained, however, by institutions (such as private property) and customs which, originating in the necessity of avoiding conflict, subordinated the pursuit of individual interests to the welfare of both the community and other individuals. While Hume did not relate his analysis to the population problem, he did show, in consistence with his analysis, that in times or circumstances of extreme scarcity the principles of communism would have to become operative to resolve the conflict in interests. Malthus reasoned, much as had Hobbes, that nature is niggardly in relation to the aggregate of human wants, and that this aggregate tends constantly to grow in consequence of man's biological proclivity to multiply so long as subsistence is accessible; therefore he concluded, like Hobbes and unlike Locke, that the interests of men are in conflict. Malthus reasoned further—again in a manner analogous to that of Hobbes—that the proclivity of men to multiply failed to precipitate a continuous, universal, and unrestricted struggle for exist-

ence only in proportion as the very institutions condemned by Godwin and others (e.g., property, marriage, the state) served to saddle responsibility upon each individual for his actions and to hold in check man's multiplicative tendencies. Whereas Hobbes found in a powerful centralized government the only curb upon conflict between men, Malthus found it in the preservation and strengthening of those components of the institutional structure which made for prudence, frugality, and moral restraint. Furthermore, Malthus rejected roseate forecasts of the future; man's climb had been difficult and it would remain hard and slow.

Both the Hobbesian and the Lockian types of interpretation of human nature and interhuman relations had adherents until nearly the close of the eighteenth century. The mercantilist pattern of values, which came into vogue following the dissolution of the essentially Lockian medieval scheme, was Hobbesian in character, for it took civil and international conflict for granted. In the eighteenth century, however, variants of Lockianism gradually replaced variants of Hobbesianism until in the closing years of the century the consensus of opinion was Lockian. Variants of Hobbesianism, coupled at times (e.g., in the writings of Necker) with a kind of proto-Malthusianism, appear in the works of those whom we have labeled as extreme antiphysiocrats; and in some of these works, in especial those of Necker, are to be found Hobbesian arguments for vigorous governmental regulation, and in some there is considerable pessimism concerning man's future. Cantillon and his followers recognized the existence of conflicts in interests, yet implicitly supposed that they would be somewhat reduced through the operation of a rudimentary self-adjusting economic mechanism.

On the whole, however, the spirit of Locke or of Hume predominated in the works of the eighteenth-century French writers. At the turn of the century Boisguillebert, even though concerned with conflict in interests, anticipated a potentially beneficent self-adjusting economic mechanism. The physiocrats and those of the philosophes who conceived of nature and her laws in much the same manner as the physiocrats took for granted the fundamental identity of interests and meliorative character of social evolution, and the gradual though limited improvability of man's condition. Many writers from Saint-Pierre to Condorcet were

even more optimistic concerning the future condition of man. Some, who described existing society in terms remindful of Hobbes, expressed complete confidence in man's ability to remove social evils by reorganizing society along preconceived lines. Those whom we have labeled repopulationists were equally optimistic concerning the efficacy of their proposed reforms. Rousseau, originally a pessimist, rejected Hobbes's interpretation and proclaimed the original goodness of man. D'Holbach supposed that men's awareness of their mutual interdependence could triumph over their laziness and desire to live without labor and over the consequent tendency to conflict. The restraining influence of custom, tradition, and institutions was pointed to by Montesquieu, (at times) by Mirabeau, by some of the philosophes, and by others. In sum, the majority of the French writers, while very critical of prevailing institutions and while aware of existing conflicts in interests and of other grounds for pessimism, were confident that, given institutional reforms and education and legislation along lines indicated by them, this conflict would be greatly reduced or eliminated, grounds for pessimism would dissolve, well-being would be shared by all or nearly all members of the community, and men would conduct themselves in such wise as to conserve this happy state of affairs.

As we have shown elsewhere, the early nineteenth century witnessed in France a virtual, though temporary, triumph of Malthusianism.³⁷ This triumph was the result in part of Malthus' own writings, in part of the indigenous Malthusianism of such French writers as J. B. Say. Whether or not Malthusianism would have become ascendant in early nineteenth-century France, had Malthus not written, one cannot with certainty say. That the problem of resolving the conflict of interest, as finally set forth in Malthus' *Essay*, would have been faced, even had the latter work not appeared, seems a foregone conclusion. For the two strains in French thought, analogous to the Maltho-Hobbesian and the Godwin-Lockian strains in English thought, would have become more and more explicit, and the fundamental contradictions would have become apparent, until in the end a resolution or synthesis would have proved necessary.

³⁷ *J. P. E.*, XLIV (1936), 577-611.

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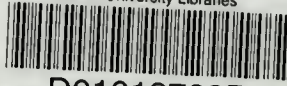
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